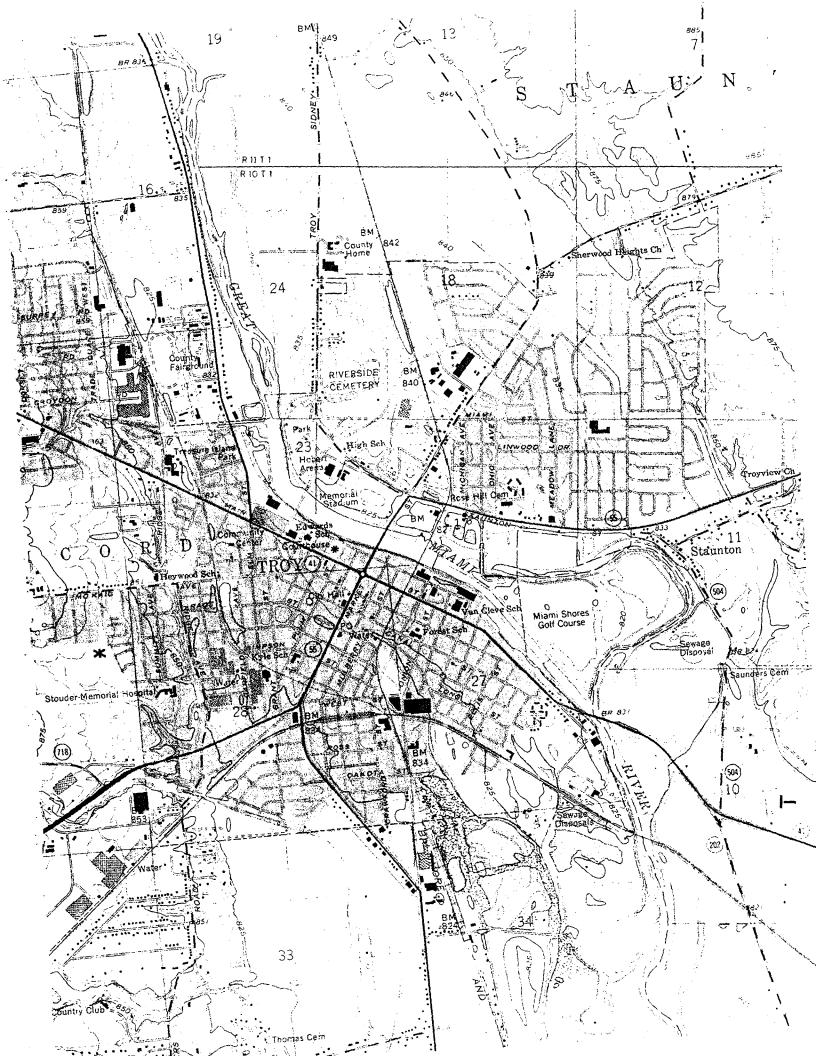


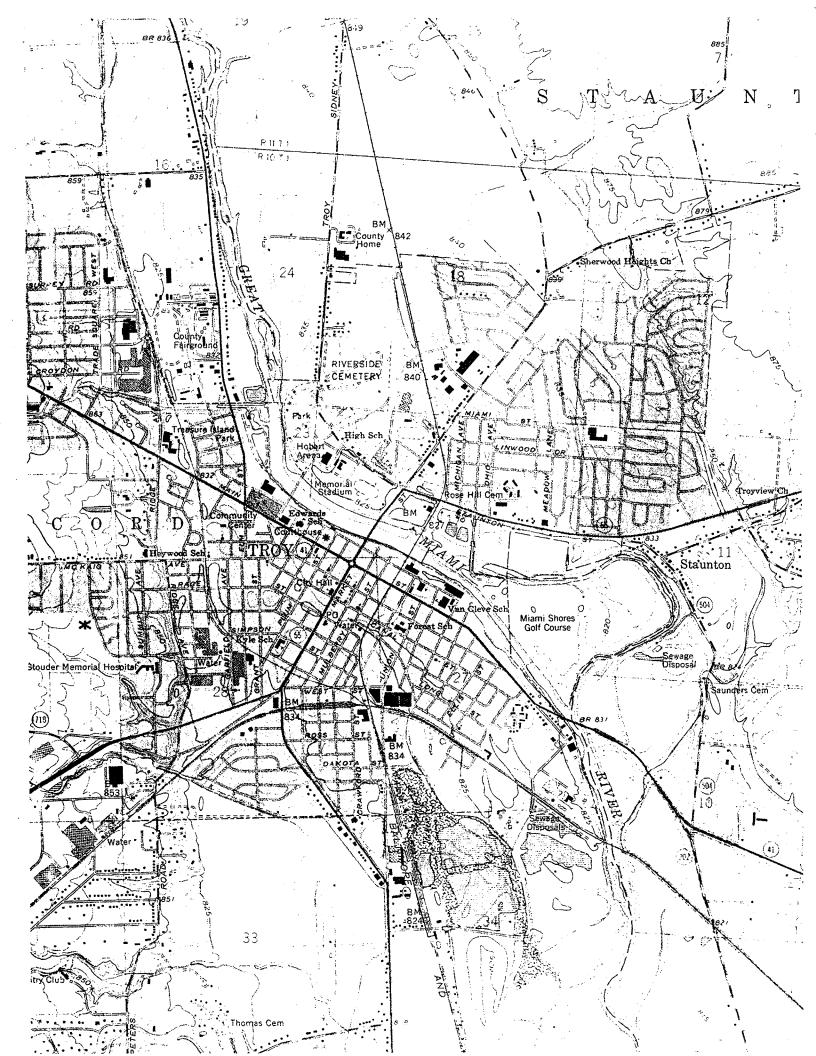
Inquiry Number:	7-79028-5	
TP Quad [	Adj Quad []	↑N
Quad Tro	<b>Y</b>	
Minute Series [7.5		
Year <u>1972</u>	[]Provisional Edition	[]Revised
#Photorevised []Insp	ected from 1961	
Scale [] 1:24,000	[] 1:25,000 [] 1:50,0	000
[] 1:62,500	∏ 1:100,000 ∏ 1:125.	.000



Inquiry	Number:	779078-	5
TP Qua	id H	Adj Quad []	↑N
Quad _	Troy		
Minute	Series [7.5]	[] 15 [] 30 [] 30x6	50
Year ]	982	[]Provisional Edition	on []Revised
[]Photor	evised []Inspe	ected from 196	o(
Scale	[]1:24,000	[] 1:25,000 [] 1::	50,000
	[] 1:62,500	[] 1:100,000 [] 1:	125,000

.

.



Inquiry Number	r: 7-29028-5		
TP Quad [	Adj Quad []	↑N	
Quad To	5 Y		
Minute Series [	77/5 [] 15 [] 30 [] 30x60		
Year 1984	[]Provisional Edition	[]Revised	
[Photorevised []	Inspected from 1961	·	
	00 [] 1:25,000 [] 1:50,		
[] 1:62,5	00 []1:100,000 [] 1:125	,000	

F

Appendix F
City Directories, Historical
Topographic Maps and Telephone
Interviews for Plant No. 2



## **The EDR-City Directory** Abstract

**Spinnaker Coating** 518 E. Water Street Troy, OH 45373

February 01, 2002

Inquiry Number: 729028-6

## **The Source** For Environmental **Risk Management Data**

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050 Fax: 1-800-231-6802

# Environmental Data Resources, Inc. City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-00, Section 73 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.

To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following standard historical sources may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-00 requires All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful. (ASTM E 1527-00, Section 7.3.4, page 12. EDR's City Directory Abstract includes a search and abstract of available city directory data.

City Directories

City directories have been published for cities and towns across the U.S. since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. Twentieth century directories are generally divided into three sections: a business index, a list of resident names and addresses, and a street index. With each address, the directory lists the name of the resident or, if a business is operated from this address, the name and type of business (if unclear from the name). While city directory coverage is comprehensive for major cities, it may be spotty for rural areas and small towns. ASTM E 1528-00 specifies that a review of city directories (standard historical sources) at less than approximately five year intervals is not required by this practice. (ASTM E 1528-00, Section 7.3.4, page 12.)

Please call EDR Nationwide Customer Service at 1-800-352-0050 (8am-8pm EST) with questions or comments about your report.

Thank you for your business!

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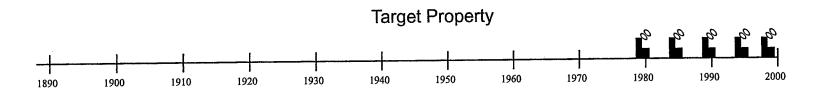
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# Prior Use Report® Timeline







= Historical Topographic Map (HT)



= Flood Prone/FEMA Maps (FP/FR) \*

= Aerial Photos Included (P)

+ = Aerial Photos Available \*

= Residential (R)

= Commercial or Industrial (C)

Superscript number corresponds to graph ID in text

\*Displayed on timeline when aerial photos, flood prone, FEMA, wetland maps, or Aerial Research Summary are purchased.

**Target Property:** 

Address: City/State/Zip:

Spinnaker Coating 518 E. Water Street Troy, OH 45373

Customer: ERM, Inc. Contact:

Inquiry #:

Leigh Anne Sievert 729028-6

Date: 2/1/2002 page 1

#### 4. SUMMARY

#### • City Directories:

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1980 through 1999. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

#### **Date EDR Searched Historical Sources:**

City Directories

Feb 01, 2002

Target Property: 518 E. Water Street Troy, OH 45373

PUR ID <u>Year</u>	<u>Uses</u>	Portion-Findings (FIM Information Only)	Source
1980	Brownbridge		Haines Criss Cross Directory
	KimberlyClark		
 1985	Brownbridge KimberlyClark		Haines Criss Cross Directory
 1990	Brownbridge KimberlyClark		Haines Criss Cross Directory

Haines Criss Cross Directory

Haines Criss Cross Directory

## **Adjoining Properties**

Brownbridge

KimberlyClark

Brown Bridge Ind

#### **SURROUNDING**

--1995

--1999

Multiple Addresses

PUR ID <u>Year</u>	<u>Uses</u>	Portion-Findings (FIM Information Only)	<u>Source</u>
1980	**E Water**		Haines Criss Cross Directory
	St Patrick School (420)		
	Residence (423)		
	No Return (450)		
	Troy City School (523)		
	-No other listings within range		
1985	**E Water**		Haines Criss Cross Directory
	St Patrick School (420)		
	Residence (423)		
	No Return (450)	•	
	Troy City School (523)		
	-No other listings within range		
1990	**E Water**		Haines Criss Cross Directory
	St Patrick School (420)		
	Residence (423)		·

#### PUR ID

Year Uses

1990 (continued)

No Return (450)

Troy City School (523)

-No other listings within range

1995

\*\*E Water\*\*

St Patrick School (420)

Residence (423)

No Return (450)

Troy City School (523)

-No other listings within range

1999

\*\*E Water\*\*

St Patrick School (420)

Residence (423)

No Return (450)

Troy City School (523)

-No other listings within range

Portion-Findings (FIM Information Only)

Source

Haines Criss Cross Directory

Haines Criss Cross Directory

### Glossary of Terms

#### A.A.A.

Aerial photograph flyer: Agriculture Adjustment Administration (Federal).

#### A.S.C.S

Aerial photograph flyer: Agricultural Stabilization and Conservation Service (Federal)

#### Address in Research Source

Indicates that a property is listed at a different address than the one provided by the user. Generally occurs when a property is located on a corner or, when the physical address of a property is different than its mailing address.

#### Address Not Listed in Research Source

Occurs when a specific site address is not listed in city directories and/or fire insurance maps.

#### Adjoining

Any property that is contiguous, or a property that would be contiguous if not for a public thoroughfare, to the target property. To differentiate from each adjoining property, stand at the target property's "front door" facing the street.

#### **Adjoining Back**

Property directly to the rear of the target property. (Applies only to fire insurance map data.)

#### **Adjoining Front**

Property directly in front of the target property. (Applies only to fire insurance map data.)

#### Adjoining Left

Property directly to the left of the target property. (Applies only to fire insurance map data.)

#### Adjoining Right

Property directly to the right of the target property. (Applies only to fire insurance map data.)

#### Adjoining Surrounding Area

Property that may adjoin the target property but due to lack of specific map information cannot be located precisely. This situation typically occurs when city directory information, but not fire insurance map information, is available.

#### C.A.S

Aerial photograph flyer: Chicago Aerial Survey (private).

#### C.S.S.

Aerial photograph flyer: Commodity Stabilization Service (Federal).

#### Cartwright

Aerial photograph flyer: Cartwright (private)

#### CD

City Directory

#### Commercial

Any property including, but not limited to, property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units.

#### Commercial or Industrial

Property that has either a commercial or an industrial use. Examples include retail stores, manufacturing facilities, factories, and apartment buildings.

#### D.N.R.

Aerial photograph flyer: Department of National Resources (state).

#### D.O.T.

Aerial photograph flyer: Department of Transportation (state).

#### Fairchild

Aerial photograph flyer: Fairchild (private).

#### **FIM**

Fire Insurance Map

#### Flood Insurance Rate Maps

Flood Insurance Rate Maps are produced by the Federal Emergency Management Agency (FEMA). These maps indicate special flood hazard areas, base flood elevations and flood insurance risk zones.

#### Flood Prone Area Maps

Flood Prone Area maps are produced by the United States Geological Survey (USGS). Areas identified as flood prone have been determined by available information gathered from past floods.

#### F.S.

Aerial photograph flyer: Forest Service (Federal).

#### Geonex

Aerial photograph flyer: Geonex (private).

#### M.C.

Aerial photograph flyer: Metropolitan Council of the Twin Cities Area (state).

#### Mark Hurd

Aerial photograph flyer: Mark Hurd (private)

#### N.A.P.P.

Aerial photograph flyer: National Aerial Photography Program (Federal).

#### **National Wetland Inventory Maps**

National Wetland Inventory Maps are produced by the U.S. Fish and Wildlife Service, a division of the U.S. Department of the Interior. Wetland and deepwater habitat information is identified on a 7.5 minute U.S.G.S. topographic map. The classification system used categorizes these habitats into five systems: marine, estuarine, riverine, lacustrine and palustrine.

#### No Return

Indicates that site owner was unavailable at time of surveyor's contact. (Applies only to city directories.)

#### No Structure Identified on Parcel

Used when site boundaries and/or site address is indicated on a fire insurance map; no structure details exist.

#### Other

Occurs when the site's classification is different that EDR's standard categories. Examples may include undeveloped land and buildings with no specified function.

#### P.M.A.

Aerial photograph flyer: Production and Marketing Administration (Federal).

#### Pacific Aerial

Aerial photograph flyer: Pacific Aerial (private)

#### Portion

Refers to the fire insurance map information identified on the four quadrants of a target or adjoining property. The portions are referred to as *Frontright*, *Frontleft*, *Backright*, and *Backleft* and are determined as if one were standing at the front door, facing the street.

#### **Property Not Defined**

Used when property is not clearly demarcated on a fire insurance map.

#### Residential

Any property having fewer than five dwelling units used exclusively for residential purposes.

#### Residential with Commercial Uses (a.k.a. Multiple Purpose Address)

A business (firm) and residence at the same address. Examples include a doctor, attorney, etc. working out of his/her home.

#### Sidwell

Aerial photograph flyer: Sidwell (private).

#### Site Not Mapped

Occurs when an adjoining property has not been mapped by fire insurance map surveyors. (Applies only to fire insurance map data.)

#### Teledyne

Aerial photograph flyer: Teledyne (private)

#### Topographic Maps

Topographic maps are produced by the United States Geological Survey (USGS). These maps are color coded line and symbol representations of natural and selected artificial features plotted to scale.

#### **Turnbow**

Aerial photograph flyer: Michael Turnbow (private)

#### U.S.D.A.

Aerial photograph flyer: United States Department of Agriculture (Federal).

#### U.S.D.I.

Aerial photograph flyer: United States Department of the Interior (Federal).

#### U.S.G.S.

Aerial photograph flyer: United States Geological Survey (Federal).

#### Vacant

May refer to an unoccupied structure or land. Used only when fire insurance map or city directory specifies 'vacant.'

#### W.P.A.

Aerial photograph flyer: Works Progress Administration (Federal).

#### WALLACE

Aerial photograph flyer: Wallace (private).



## The EDR-Historical Topographic Map Report

Spinnaker Coating 30 Mary Bill Drive Troy, OH 45373

January 30, 2002

Inquiry Number: 729029-5

## The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050 Fax: 1-800-231-6802

## Environmental Data Resources, Inc. Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property, and its surrounding area, resulting from past activities. ASTM E 1527-94, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable is defined as information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.

To meet the prior use requirements of ASTM E 1527-94, Section 7.3.2, the following standard historical sources may be used: aerial photographs, city directories, fire insurance maps, topographic maps, property tax files, land title records (although these cannot be the sole historical source consulted), building department records, or zoning/and use records. ASTM E 1527-94 requires "All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful." (ASTM E 1527-94, Section 7.3.2 page 11.)

EDR's Historical Topographic Map Report includes a search of available public and private color historical topographic map collections.

#### Topographic Maps

A topographic map (topo) is a color coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topos show the shape, elevation, and development of the terrain in precise detail by using contour lines and color coded symbols. Many features are shown by lines that may be straight, curved, solid, dashed, dotted, or in any combination. The colors of the lines usually indicate similar classes of information. For example, topographic contours (brown); lakes, streams, irrigation ditches, etc. (blue); land grids and important roads (red); secondary roads and trails, railroads, boundaries, etc. (black); and features that have been updated using aerial photography, but not field verified, such as disturbed land areas (e.g., gravel pits) and newly developed water bodies (purple).

For more than a century, the USGS has been creating and revising topographic maps for the entire country at a variety of scales. There are about 60,000 U.S. Geological Survey (USGS) produced topo maps covering the United States. Each map covers a specific quadrangle (quad) defined as a four-sided area bounded by latitude and longitude. Historical topographic maps are a valuable historical resource for documenting the prior use of a property and its surrounding area, and due to their frequent availability can be particularly helpful when other standard historical sources (such as city directories, fire insurance maps, or aerial photographs) are not reasonably ascertainable.

## Quadrangle Relation Chart

7.5 minute series Scale = 1: 24,000 Inquiry # 7 29029-5

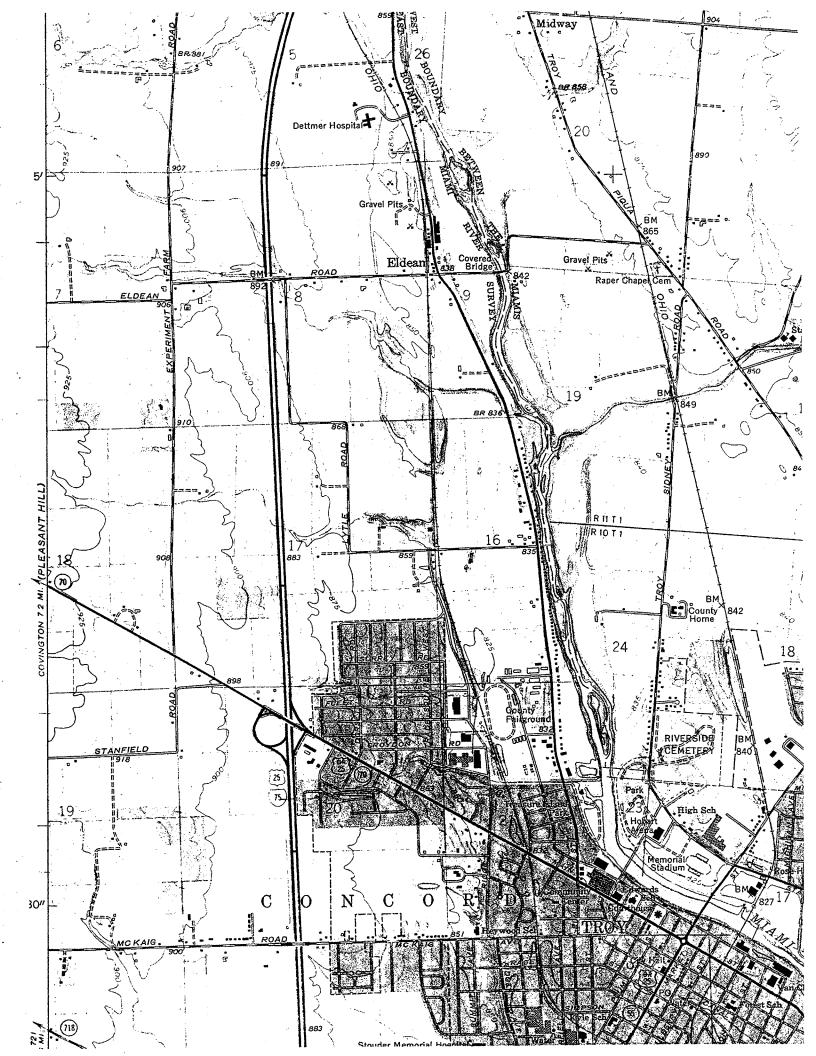
Adjoining Quadrant

Pleasant Hill

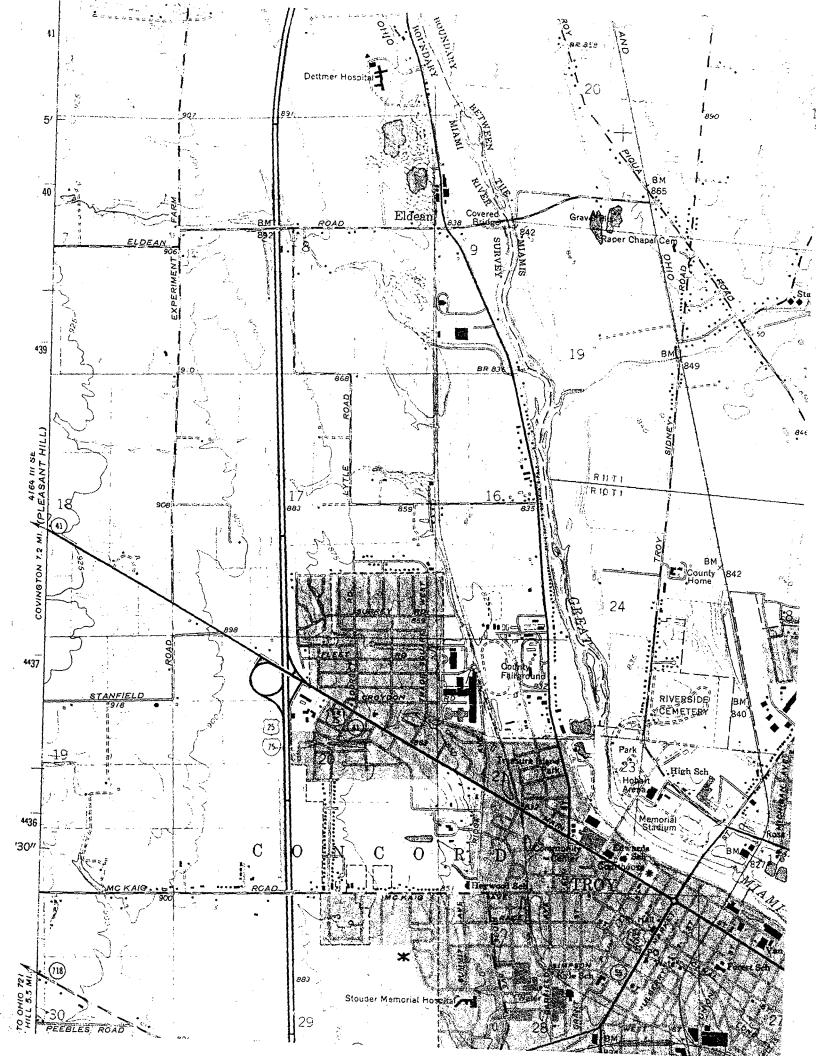
Target Quadrant

Troy



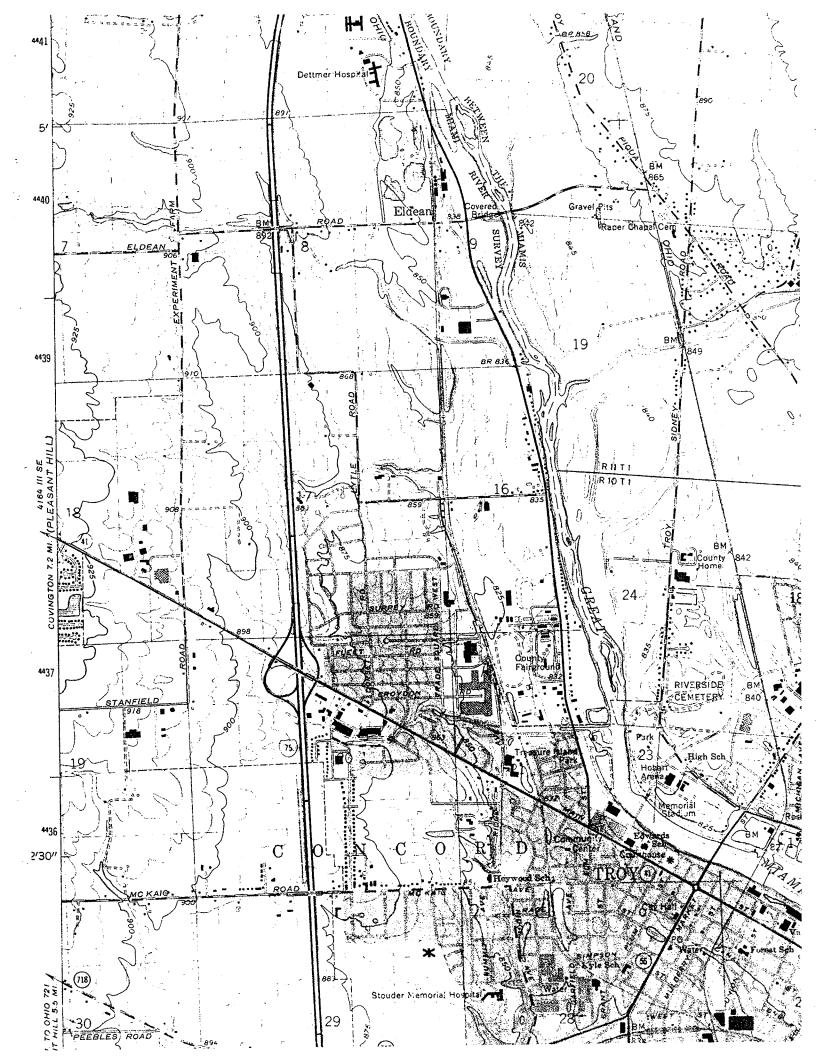


Inquiry Number:	7-29029-5	<b>-</b>
TP Quad	Adj Quad []	↑N
Quad Troy		
Minute Series 17.5	[] 15 [] 30 [] 30x60	
Year 1961	[Provisional Edition	[]Revised
[]Photorevised []Inspe	ected from	
Scale [] 1:24,000	[] 1:25,000 [] 1:50,	000
∏ 1:62,500	∏ 1:100,000 ∏ 1:125	5,000

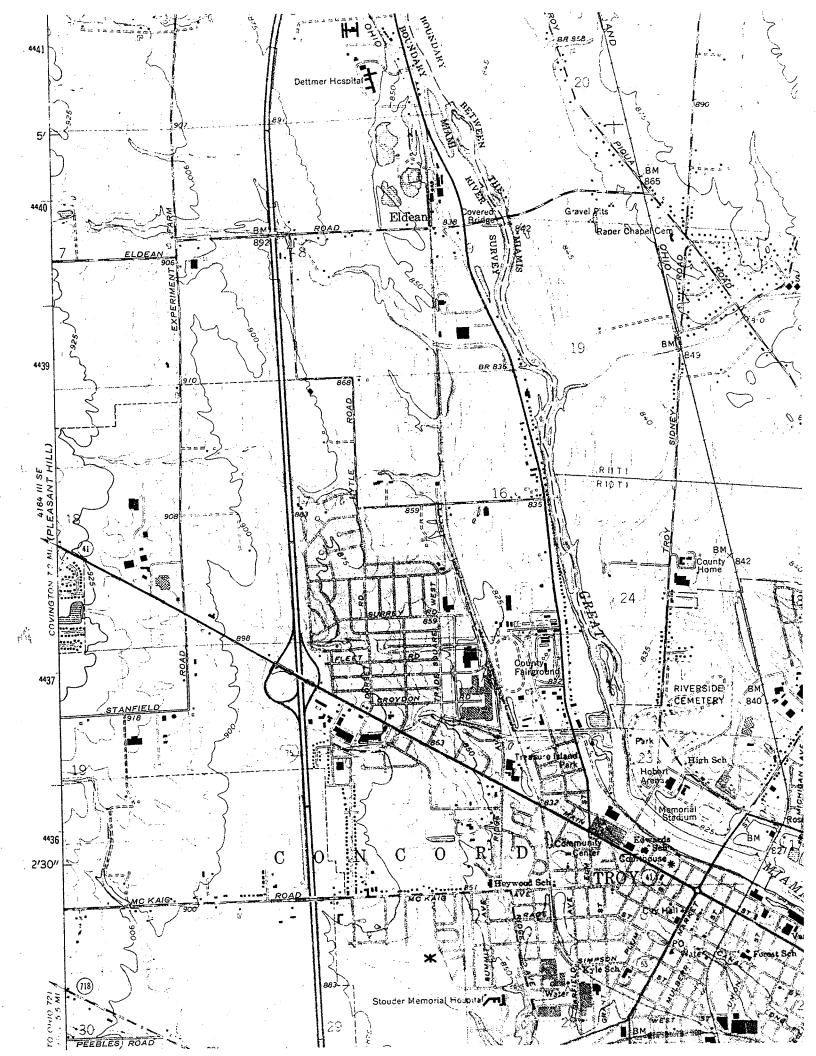


Inquiry	/ Number:	7-29629-5	
TP Qu	ad []	Adj Quad []	↑N
	Tray	/	
		[] 15 [] 30 [] 30x60	
Year _	1972	[[Provisional Edition ]]Re	evised
[]Photo	revised []Insp	ected from 1965	
Scale	[] 1:24,000	[] 1:25,000 [] 1:50,000	
	[] 1:62,500	[] 1:100,000 [] 1:125,000	
		•	
		•	

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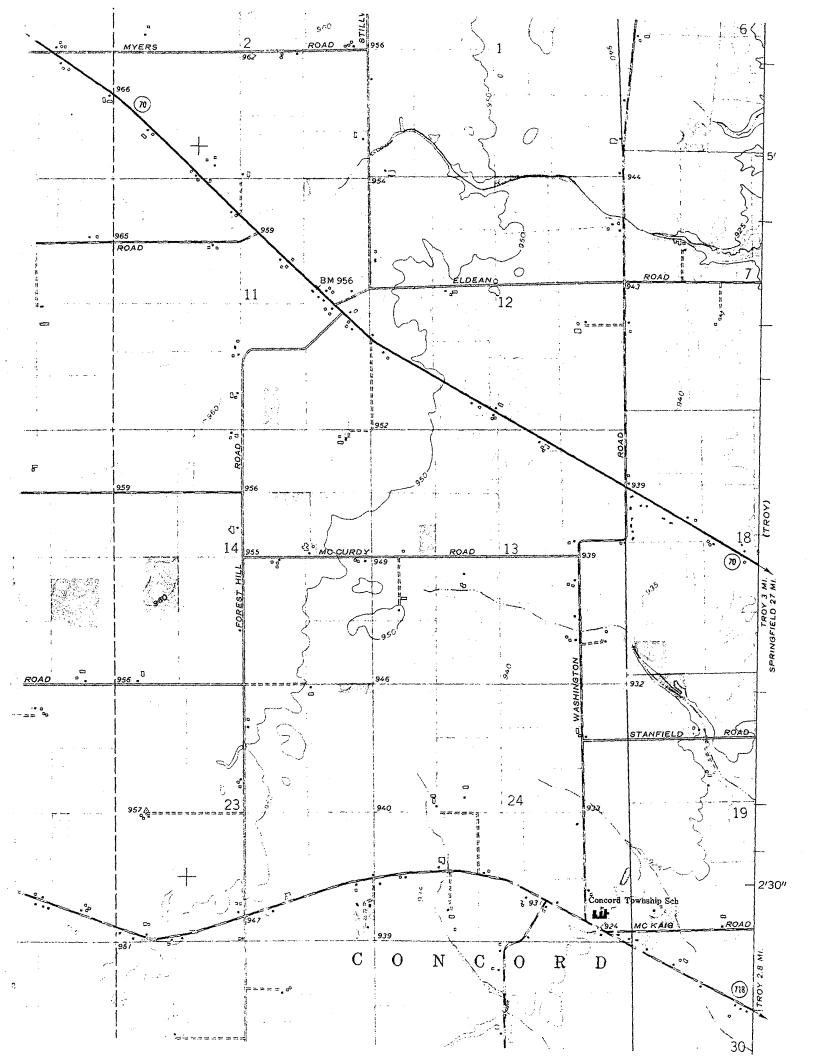
Inquiry Number:	729029-5	
TP Quad	Adj Quad []	↑N
Quad Tro	<u> </u>	,
Minute Series	7.5 [] 15 [] 30 [] 30x60 []Provisional Edition [	<del></del>
Year 1982	Provisional Edition [	]Revised
[Photorevised []]	nspected from 1761	
Scale [] 1:24,00		
[] 1:62,50	00 [] 1:100,000 [] 1:125,	,000



Inquiry Number: TP Quad {	7-29029-5 Adj Quad []	
Quad Tro		
Minute Series [7.3	[] 15 [] 30 [] 30x60	
Year 1984	[]Provisional Edition []I	Revised
[Photorevised [Insp	ected from 1967	
Scale 11:24,000	[] 1:25,000 [] 1:50,000	)
[] 1:62,500	☐ 1:100,000 ☐ 1:125,00	0

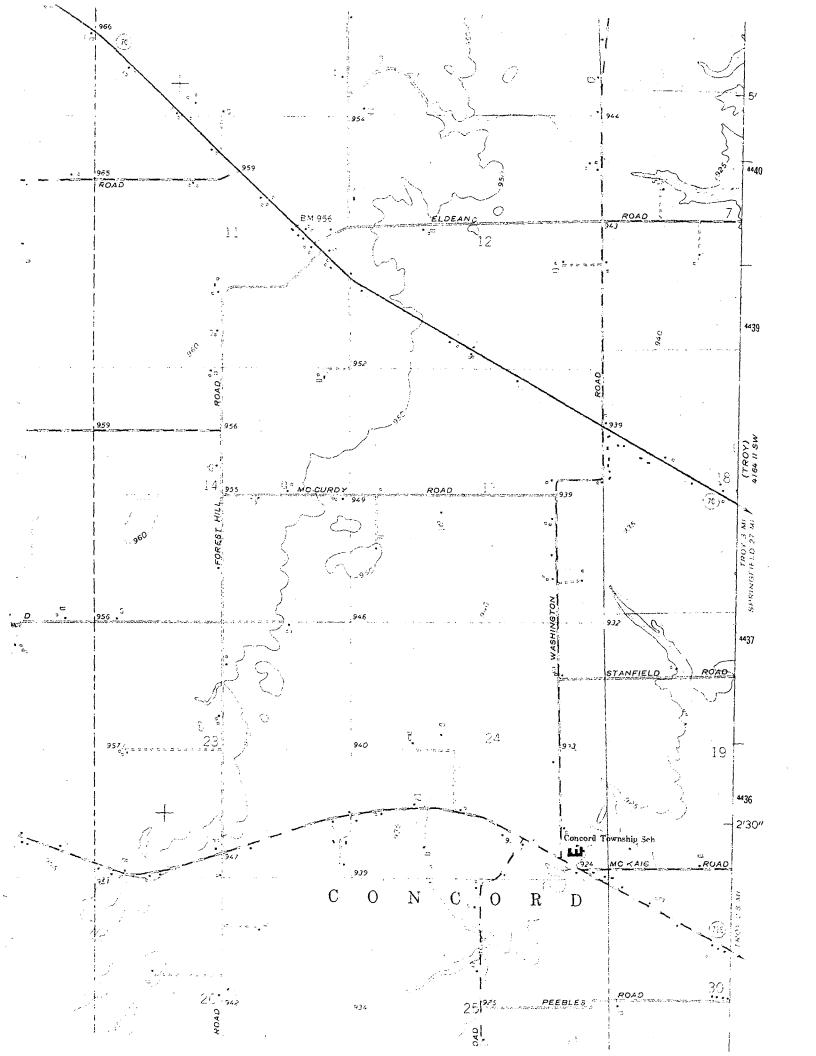
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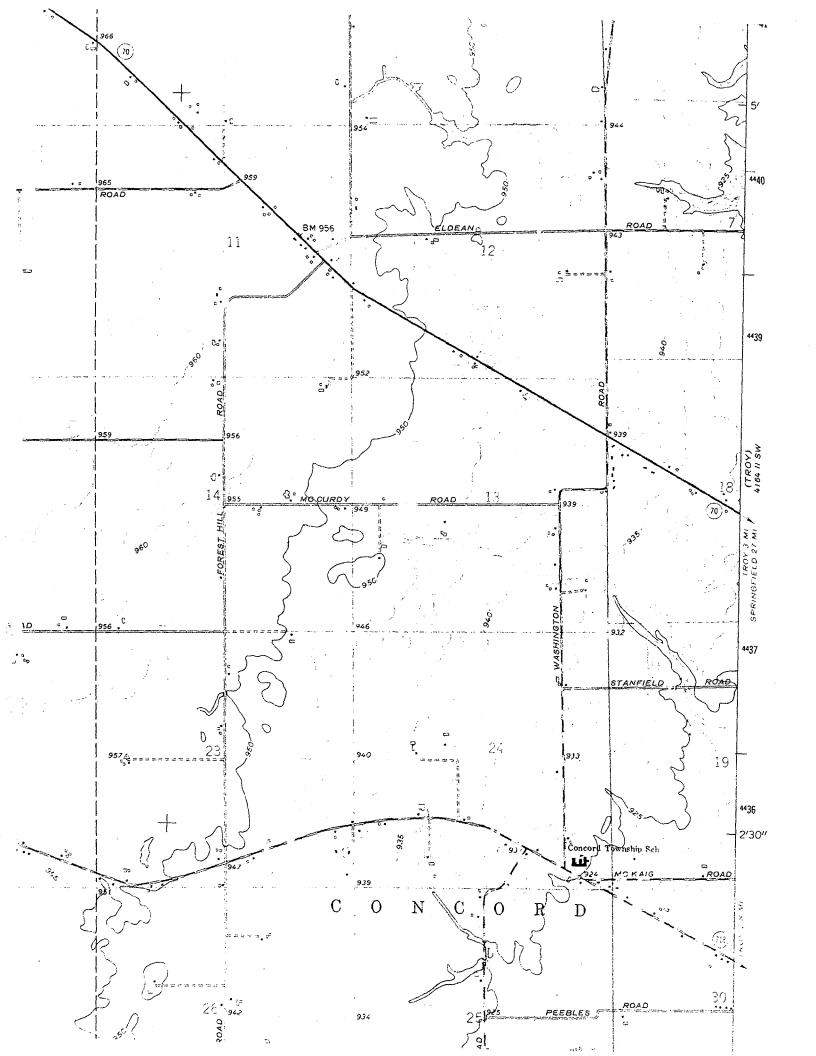
Inquiry	Number:	729029-5	
TP Qu			↑N
Quad_	Pleasa	at Hill	
Minute	Series #7.5	[] 15 [] 30 [] 30x60	
Year _	1961	[]Provisional Edition	[]Revised
		ected from	
Scale	1:24,000	[] 1:25,000 [] 1:50	,000
	П 1:62.500	П 1:100.000 П 1:12:	5.000

<u>;</u>



Inquiry N	Number:	72902	9-5	_
TP Quad	[]	Adj Quad		↑N
Quad	P189	sant	Hill	
Minute Se	eries [] 7.5	[] 15 [] 30 [	] 30x60	
Year	1473	[]Provisional	Edition []Re	vised
[]Photorev	rised Hrispe	ected from	1961	<del></del>
	•	[] 1:25,000		
[]	1:62,500	[] 1:100,000	[] 1:125,000	
			-	

•



Inquiry Number:	779029-5	
	Adj Quad-	↑N
	sant Hill	
Minute Series []	7.5 [] 15 [] 30 [] 30x60	
Year <u>1963</u>	[]Provisional Edition	[]Revised
[]Photorevised []fin	spected from 196	
Scale []T:24,00	0 [] 1:25,000 [] 1:50,	000
[] 1:62,50	0 [] 1:100,000 [] 1:125	,000



# The EDR-City Directory Abstract

Spinnaker Coating 30 Mary Bill Drive Troy, OH 45373

February 01, 2002

Inquiry Number: 729029-6

## The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050

Fax: 1-800-231-6802

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Thank you for your business!

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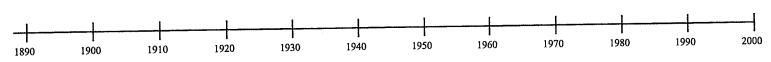
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# Prior Use Report® Timeline









= Historical Topographic Map (HT)



= National Wetland Inventory Map (WT)



= Flood Prone/FEMA Maps (FP/FR) \*



= Residential (R)



= Aerial Photos Included (P) \*



+ = Aerial Photos Available \*



= Commercial or Industrial (C)

Superscript number corresponds to graph ID in text

\*Displayed on timeline when aerial photos, flood prone, FEMA, wetland maps, or Aerial Research Summary are purchased.

**Target Property:** 

Address: City/State/Zip:

Spinnaker Coating 30 Mary Bill Drive Troy, OH 45373

Contact: Inquiry #:

Date:

Customer: ERM, Inc. Leigh Sievert 729029-6 2/1/2002

page 1

### 4. SUMMARY

### • City Directories:

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1980 through 1999. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

## **Date EDR Searched Historical Sources:** City Directories Feb 01, 2002

Target Property: 30 Mary Bill Drive Troy, OH 45373

PUR ID <u>Year</u>	<u>Uses</u>	Portion-Findings (FIM Information Only)	Source
1980	Address not Listed in Research Source		Haines Criss Cross Directory
1985	Address not Listed in Research Source		Haines Criss Cross Directory
1990	Address not Listed in Research Source	·	Haines Criss Cross Directory
1995	Address not Listed in Research Source		Haines Criss Cross Directory
1999	Address not Listed in Research Source		Haines Criss Cross Directory

### **Adjoining Properties**

SURROUNDING Multiple Addresses

Troy, C	OH 45373		
PUR II <u>Year</u>	Uses	Portion-Findings (FIM Information Only)	Source
1980	**Mary Bill Dr**		Haines Criss Cross Directory
	Address not listed in research source (15)		
	Raconex (20)	•	
•	Address not listed in research source (33)		
	Liberty Tool (35)		
	Lefco Tool (35)		
	Stanley Auto (55)		
	-No other listings within range		
1985	**Mary Bill Dr**		Haines Criss Cross Directory
•	Address not listed in research source (15)		
	Raconex (20)		
	Address not listed in research source (33)		
	Liberty Tool (35)		
	Lefco Tool (35)		
	Stanley Auto (55)		
•	-No other listings within range		
1990	**Mary Bill Dr**		Haines Criss Cross Directory
	Datajam (15)		·
	Raconex (20)		
	Address not listed in research source (33)		
	Liberty Tool (35)		
	Technacast (35)		

### **PUR ID**

<u>Year</u>

ar Uses

1990 (continued)

Ishmael Precision (55)

-No other listings within range

1995

\*\*Mary Bill Dr\*\*

Jayna Inc (15)

Raconex (20)

No Return (33)

Liberty Tool (35)

Plastronic (35)

Ishmael Precision (55)

-No other listings within range

1999

\*\*Mary Bill Dr\*\*

Jayna Inc (15)

Raconex (20)

No Return (33)

Liberty Tool (35)

Plastronic (35)

Ishmael Precision (55)

-No other listings within range

Portion-Findings (FIM Information Only)

Source

Haines Criss Cross Directory

Haines Criss Cross Directory

## Glossary of Terms

### A.A.A.

Aerial photograph flyer: Agriculture Adjustment Administration (Federal).

### A.S.C.S

Aerial photograph flyer: Agricultural Stabilization and Conservation Service (Federal)

### Address in Research Source

Indicates that a property is listed at a different address than the one provided by the user. Generally occurs when a property is located on a corner or, when the physical address of a property is different than its mailing address.

### Address Not Listed in Research Source

Occurs when a specific site address is not listed in city directories and/or fire insurance maps.

### Adjoining

Any property that is contiguous, or a property that would be contiguous if not for a public thoroughfare, to the target property. To differentiate from each adjoining property, stand at the target property's "front door" facing the street.

### **Adjoining Back**

Property directly to the rear of the target property. (Applies only to fire insurance map data.)

### **Adjoining Front**

Property directly in front of the target property. (Applies only to fire insurance map data.)

### **Adjoining Left**

Property directly to the left of the target property. (Applies only to fire insurance map data.)

### **Adjoining Right**

Property directly to the right of the target property. (Applies only to fire insurance map data.)

### Adjoining Surrounding Area

Property that may adjoin the target property but due to lack of specific map information cannot be located precisely. This situation typically occurs when city directory information, but not fire insurance map information, is available.

### C.A.S

Aerial photograph flyer: Chicago Aerial Survey (private).

### C.S.S.

Aerial photograph flyer: Commodity Stabilization Service (Federal).

### Cartwright

Aerial photograph flyer: Cartwright (private)

### CD

City Directory

### Commercial

Any property including, but not limited to, property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units.

### Commercial or Industrial

Property that has either a commercial or an industrial use. Examples include retail stores, manufacturing facilities, factories, and apartment buildings.

### D.N.R.

Aerial photograph flyer: Department of National Resources (state).

### D.O.T.

Aerial photograph flyer: Department of Transportation (state).

### Fairchild

Aerial photograph flyer: Fairchild (private).

### **FIM**

Fire Insurance Map

### Flood Insurance Rate Maps

Flood Insurance Rate Maps are produced by the Federal Emergency Management Agency (FEMA). These maps indicate special flood hazard areas, base flood elevations and flood insurance risk zones.

### Flood Prone Area Maps

Flood Prone Area maps are produced by the United States Geological Survey (USGS). Areas identified as flood prone have been determined by available information gathered from past floods.

### F.S.

Aerial photograph flyer: Forest Service (Federal).

### Geonex

Aerial photograph flyer: Geonex (private).

### M.C.

Aerial photograph flyer: Metropolitan Council of the Twin Cities Area (state).

### Mark Hurd

Aerial photograph flyer: Mark Hurd (private)

### N.A.P.P.

Aerial photograph flyer: National Aerial Photography Program (Federal).

### National Wetland Inventory Maps

National Wetland Inventory Maps are produced by the U.S. Fish and Wildlife Service, a division of the U.S. Department of the Interior. Wetland and deepwater habitat information is identified on a 7.5 minute U.S.G.S. topographic map. The classification system used categorizes these habitats into five systems: marine, estuarine, riverine, lacustrine and palustrine.

### No Return

Indicates that site owner was unavailable at time of surveyor's contact. (Applies only to city directories.)

### No Structure Identified on Parcel

Used when site boundaries and/or site address is indicated on a fire insurance map; no structure details exist.

### Other

Occurs when the site's classification is different that EDR's standard categories. Examples may include undeveloped land and buildings with no specified function.

### P.M.A.

Aerial photograph flyer: Production and Marketing Administration (Federal).

### **Pacific Aerial**

Aerial photograph flyer: Pacific Aerial (private)

### Portion

Refers to the fire insurance map information identified on the four quadrants of a target or adjoining property. The portions are referred to as *Frontright*, *Frontleft*, *Backright*, and *Backleft* and are determined as if one were standing at the front door, facing the street.

### **Property Not Defined**

Used when property is not clearly demarcated on a fire insurance map.

### Residential

Any property having fewer than five dwelling units used exclusively for residential purposes.

### Residential with Commercial Uses (a.k.a. Multiple Purpose Address)

A business (firm) and residence at the same address. Examples include a doctor, attorney, etc. working out of his/her home.

### Sidwell

Aerial photograph flyer: Sidwell (private).

### Site Not Mapped

Occurs when an adjoining property has not been mapped by fire insurance map surveyors. (Applies only to fire insurance map data.)

### Teledyne

Aerial photograph flyer: Teledyne (private)

### Topographic Maps

Topographic maps are produced by the United States Geological Survey (USGS). These maps are color coded line and symbol representations of natural and selected artificial features plotted to scale.

### **Turnbow**

Aerial photograph flyer: Michael Turnbow (private)

### U.S.D.A.

Aerial photograph flyer: United States Department of Agriculture (Federal).

### U.S.D.I.

Aerial photograph flyer: United States Department of the Interior (Federal).

### U.S.G.S.

Aerial photograph flyer: United States Geological Survey (Federal).

### Vacant

May refer to an unoccupied structure or land. Used only when fire insurance map or city directory specifies 'vacant.'

### W.P.A.

Aerial photograph flyer: Works Progress Administration (Federal).

### WALLACE

Aerial photograph flyer: Wallace (private).



## The EDR-Telephone Interview Report

**Spinnaker Coating** 30 Mary Bill Drive Troy, OH 45373

February 4, 2002

Inquiry Number: 729029-8

## **The Source** For Environmental **Risk Management Data**

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050 Fax: 1-800-231-6802

## **Environmental Data Resources, Inc. Telephone Interviews**

Environmental Data Resources, Inc.'s (EDR) Telephone Interviews is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.

To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following standard historical sources may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-00 requires "All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful." (ASTM E 1527-00, Section 7.3.4, page 12.)

The objective of telephone interviews is to obtain information about possible recognized environmental conditions. Telephone interviews are consistent with ASTM E 1527-00, Section 10. As stated in Section 10.5 "A reasonable attempt shall be made to interview at least one staff member of any one of the following types of local government agencies: Local fire department that serves the property, local health agency or local agency or local/regional office of state health agency serving the area in which the property is located, or local agency or local/regional office of state health agency having jurisdiction over hazardous waste disposal or other environmental matters in the area in which the property is located...[i.e., State Agency Hazardous Waste Department (or equivalent)]. EDR's historical researchers will identify and contact the following local government officials (or their equivalent).

- Fire Department/Fire Marshal,

- Building/Plainning Department, or

- Health Department.

It should also be noted that "While the person conducting the interview(s) has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them. If the person conducting the interview(s) asks questions but does not receive answers or receives partial answers, this section shall not thereby be deemed incomplete, provided that questions have been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and their responses." (ASTM E 1527-00, Section 10.5 and 10.8, page 16)

In the event a local government official is unavailable, EDR will place two followup phone calls and document all results. This process will help ensure timely report delivery.

Please call EDR Nationwide Customer Service at 1-800-352-0050 (8am-8pm EST) with questions or comments about your report.

Thank you for your business!

## Disclaimer Copyright and Trademark Notice

This report contains information from a variety of public and other sources. Environmental Data Resources, Inc. (EDR) has relied on the information provided to it from such sources. EDR has not reviewed and does not warrant or guarantee the completeness, accuracy, timeliness or authenticity of such information in preparing this report. THE INFORMATION AND METHODOLOGY USED TO COMPILE THIS REPORT, AND THE ANALYSIS AND SERVICES INTENDED TO BE PROVIDED BY THIS REPORT ARE PROVIDED "AS IS" WITHOUT WARRANTY OR GUARANTY OF ANY KIND. EDR DISCLAIMS ANYOTHEREXPRESSORIMPLIED WARRANTIES WITH RESPECT TO THIS REPORT AND ALL THE INFORMATION CONTAINED HEREIN, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall EDR be liable for any indirect, special, punitive or consequential damages, whether arising out of contract, tort or otherwise, arising out of this report and the information contained herein even if EDR has been advised of the possibility that such damages may arise.

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### **SUMMARY**

Telephone Interview:

(Begins on the following page)

### **Interviews with Local Government Officials**

Exceeds Requirements of ASTM E 1527-00, Section 10

Fire Department: Troy Fire Department

Date Called: 02/01/2002 Time: 9:40 a.m.

Name: Jim Bowell Title: Fire Inspector Phone: 937-335-5678

Referred to Another Answered Questions X Not Available

#1. To the best of your knowledge, are you aware of any releases of hazardous substances or petroleum products on or near the target property? Not answered

- #2. To the best of your knowledge, are there now, or have there been in the past, any underground or above ground storage tanks located on the target property? Not answered
- #3. To the best of your knowledge, what was the history of the property? Of the area?

  Not answered
- #4. Other information:

A message was left for Mr. Bowell to return the call as soon as possible with the requested information. A second call was made on 02/01/02 at 4:15 p.m. and a second message was left for Mr. Bowell to return the call as soon as possible with the requested information. A third and final call was made on 02/04/02 at 9:35 a.m. and final message was left for Mr. Bowell to return the call as soon as possible with the requested information.

A return call was received from Jim Bowell on February 4th. He stated that in 1978 a couple of underground storage tanks were installed to be used for fuel oil, and that the same tanks were pulled out in 1988. He said that except for false alarms, there were no fire runs on the property. The only other record Mr. Bowell had for the property was that a truck had backed into a fire hydrant, causing water to spray.

## Civil/Public Works:

Date Called: <u>02/01/2002</u>	Time: 4:48 pm	
Name:	Title:	Phone:
_ Referred to Another	_ Answered Questions	_ Not Available
#1. To the best of your knowled in a flood plain? Not answer What year flood plain Date of flood plain Panel #:	ain? Year	a's FEMA map as being
#2. To the best of your knowled Not answered	dge, what was the history of the prope	rty? Of the area?
#3. Other information: Not answered		

### Planning Department: Troy Planning & Development Department

Date Called: 02/01/2002

Time: 4:10 p.m.

Name: Aloka Roy

Title: Zoning Technician

Phone: <u>937-339-9481</u>

Referred to Another

X Answered Questions

\_ Not Available

#1. To the best of your knowledge, what is the target property's current zoning?

Ms. Roy said the property is zoned M-2 Industrial.

Past Zoning?

Ms. Roy did not have this information available.

- #2. To the best of your knowledge, what is the zoning of the surrounding neighborhood? Industrial
- #3. To the best of your knowledge, how is the target property currently used? Industrial
- #4. To the best of your knowledge, is the property served by a public or private water system, sewer or septic system?

  Public Sewer
- #5. To the best of your knowledge, what was the history of the property? Of the area?

  Ms. Roy was not familiar with the history of the property and could not provide this information.
- #6. Other information:

No other information was obtained from this contact.



"Linking Technology with Tradition"

## Sanborn® Map Report

Ship to: Leigh Sievert

**Order Date:** 1/30/2002

Completion Date: 01/31/2002

ERM, Inc.

Inquiry #: 729029.4S

355 East Campus View

P.O. #: hr501.00.01

Columbus, OH 43235

Site Name: Spinnaker Coating

Address: 30 Mary Bill Drive

City/State: Troy, OH 45373

1181019SXM

614-433-7900

**Cross Streets:** 

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client-supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

## **NO COVERAGE**

All maps provided pursuant to a Sanborn® Map Report are currently reproducible of fire insurance maps owned or licensed by Environmental Data Resources, Inc. NO WARRANTY, EXPRESSED OR IMPLIED IS MADE WHATSOEVER. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO ACCURACY, VALIDITY, COMPLETENESS, SUITABILITY, CONDITION, QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR USE OR PURPOSE WITH RESPECT TO THE REPORT, THE MAPS, THE INFORMATION CONTAINED THEREIN, OR THE RESULTS OF A SEARCH OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. Environmental Data Resources, Inc. assumes no liability to any party for any loss or damage whether arising out of errors or omissions, negligence, accident or any other cause. In no event shall Environmental Data Resources, Inc., its affiliates or agents, be liable to anyone for special, incidental, consequential or exemplary damages.

Appendix G EDR Database Search Results for Plant No. 1



# The EDR Radius Map with GeoCheck®

Spinnaker Coating 518 E. Water Street Troy, OH 45373

Inquiry Number: 1729028.3p

**January 30, 2002** 

## The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

### **TABLE OF CONTENTS**

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map.	3
Map Findings Summary	. 4
Map Findings.	. 5
Orphan Summary.	. 17
EPA Waste Codes.	EPA-1
Government Records Searched/Data Currency Tracking.	GR-1
GEOCHECK ADDENDUM	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	. <b>A-2</b>
Physical Setting Source Map.	. A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched.	. A-14

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

### TARGET PROPERTY INFORMATION

### **ADDRESS**

518 E. WATER STREET TROY, OH 45373

### **COORDINATES**

Latitude (North): Longitude (West): 40.038900 - 40° 2' 20.0"

Longitude (West): 84.19840 Universal Tranverse Mercator: Zone 16

84.198400 - 84° 11' 54.2"

UTM X (Meters):

739030.9

UTM Y (Meters):

4435625.5

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:

2440084-A2 TROY, OH

Source:

USGS 7.5 min quad index

### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 5 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
BROWN-BRIDGE PLANT #1 518 E WATER ST TROY, OH 45373	SHWS	N/A
BROWN-BRIDGE CORPORATION 518 E WATER ST TROY, OH 45373	FINDS RCRIS-LQG TRIS RCRIS-TSD CORRACTS DERR	45373KMBRL51
518 E WATER ST 518 E WATER ST TROY, OH 45373	ERNS	N/A
KIMBERLY-CLARK 518 EAST WATER STREET TROY, OH 45373	FINDS	000007355850
518 E WATER ST 518 E WATER ST TROY, OH	OH Spills	N/A
518 EAST WATER STREET EAST END OF PROPERTY 518 EAST WATER STREET EAST END OF PROPERTY TROY, OH 45373	ERNS	N/A

518 E WATER ST 518 E WATER ST TROY, OH **OH Spills** 

N/A

### **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ( "reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

### **FEDERAL ASTM STANDARD**

NPL...... National Priority List

Proposed NPL...... Proposed National Priority List Sites

, System

CERC-NFRAP...... CERCLIS No Further Remedial Action Planned

### STATE ASTM STANDARD

SWF/LF....Licensed Solid Waste Facilities
UST......Underground Storage Tank Tank File

### FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees

ROD...... Records Of Decision

Delisted NPL...... National Priority List Deletions

HMIRS..... Hazardous Materials Information Reporting System

MLTS..... Material Licensing Tracking System

MINES....... Mines Master Index File
NPL Liens...... Federal Superfund Liens
PADS........ PCB Activity Database System

TSCA..... Toxic Substances Control Act

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Funcicide, &

, Rodenticide Act)/TSCA (Toxic Substances Control Act)

### **SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### **FEDERAL ASTM STANDARD**

**RCRIS:** The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 06/21/2000 has revealed that there are 3 RCRIS-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir Map II	Page
HOBART CABINET CO	301 E WATER ST	0 - 1/8 WNW 8	8
WALTZS CLEANERS	432 E MAIN ST	0 - 1/8 WSW 9	8
SPEEDWAY 1030	801 N MAIN ST	1/8 - 1/4 <i>SE</i> 11	9

### STATE ASTM STANDARD

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Ohio Environmental Protection Agency's Master Sites List.

A review of the SHWS list, as provided by EDR, has revealed that there are 6 SHWS sites within approximately 1 mile of the target property.

Address	Dist / Dir	Map ID	Page
300 E STAUNTON RD	1/4 - 1/2 NNE	15	11
EAST WEST ST	1/2 - 1 SSW	B22	13
421 UNION ST	1/2 - 1 SSW	23	14
750 LINCOLN AVE	1/2 - 1 WSV	V 24	14
BTWN 439 / 507 N ELM	1/2 - 1 NW	26	15
507 N ELM ST	1/2 - 1 NW	27	15
	300 E STAUNTON RD EAST WEST ST 421 UNION ST 750 LINCOLN AVE BTWN 439 / 507 N ELM	300 E STAUNTON RD 1/4 - 1/2 NNE EAST WEST ST 1/2 - 1 SSW 421 UNION ST 1/2 - 1 SSW 750 LINCOLN AVE 1/2 - 1 WSW BTWN 439 / 507 N ELM 1/2 - 1 NW	300 E STAUNTON RD 1/4 - 1/2 NNE 15 EAST WEST ST 1/2 - 1 SSW B22 421 UNION ST 1/2 - 1 SSW 23 750 LINCOLN AVE 1/2 - 1 WSW 24 BTWN 439 / 507 N ELM 1/2 - 1 NW 26

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the LUST list, as provided by EDR, and dated 12/16/2001 has revealed that there are 10 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ERWIN CHRYSLER-PLYMOUTH DODGE,	120 E MAIN ST	1/8 - 1/4W	10	9
VERIZON NORTH, INC.	17-19 S MARKET	1/4 - 1/2W	12	10
COUNTRY JUNCTION	229 S MULBERRY ST	1/4 - 1/2WSW	13	10
ACTION GBW, INC.	201 E STAUNTON RD	1/4 - 1/2NNE	14	10
TROY FIRE DEPT	18 E CANAL ST	1/4 - 1/2WSW	116	12
RIVER CORRIDOR OFFICE	209 W WATER ST	1/4 - 1/2WNW	/ 17	12
MIAMI SHORES GOLF COURSE	402 E STAUNTON RD	1/4 - 1/2NE	18	12
FORMER AVEY SERVICE	430 S CRAWFORD	1/4 - 1/2SSW	19	13
RAYS TUNE UP	15 N OXFORD	1/4 - 1/2WNW	/ 20	13

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
JONES TRANSFER CO.	707 S CRAWFORD ST	1/4 - 1/2SSW	B21	13

### **PROPRIETARY DATABASES**

### Former Manufactured Gas (Coal Gas) Sites:

The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative

A review of the Coal Gas list, as provided by EDR, has revealed that there is 1 Coal Gas site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
TROY GAS CO.	1318 CLAY STREET	1/2 - 1 SSW	/ 25	15

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
DYE MILL RD LANDFILL	SHWS, DERR
HOBART BROS METAL FILLER DUMP	SHWS, DERR
TROSTEL PARK LDFL UNION STREET LDFL	CERC-NFRAP
TROY RAILROAD SITE	CERC-NFRAP
MAXINE DAVIS	LUST
FORMER GAS STA	LUST
ODOT MAINTENANCE GARAGE	LUST
WAGNER PLUMBING & HEATING	LUST
CONCORD TWP GARAGE	LUST
ELIZABETH ELEM SCHOOL	LUST
TRUE NORTH #809	UST
CITY TRANSFER AND STORAGE CO	RCRIS-SQG, FINDS

**OVERVIEW MAP - 1729028.3p - ERM, Inc.** ADOW S TEUNT (18 RD 1 Miles Target Property Sites at elevations higher than or equal to the target property Power transmission lines Sites at elevations lower than

Oil & Gas pipelines

Wetlands

TARGET PROPERTY: ADDRESS:

the target property

Landfill Sites

**Coal Gasification Sites** 

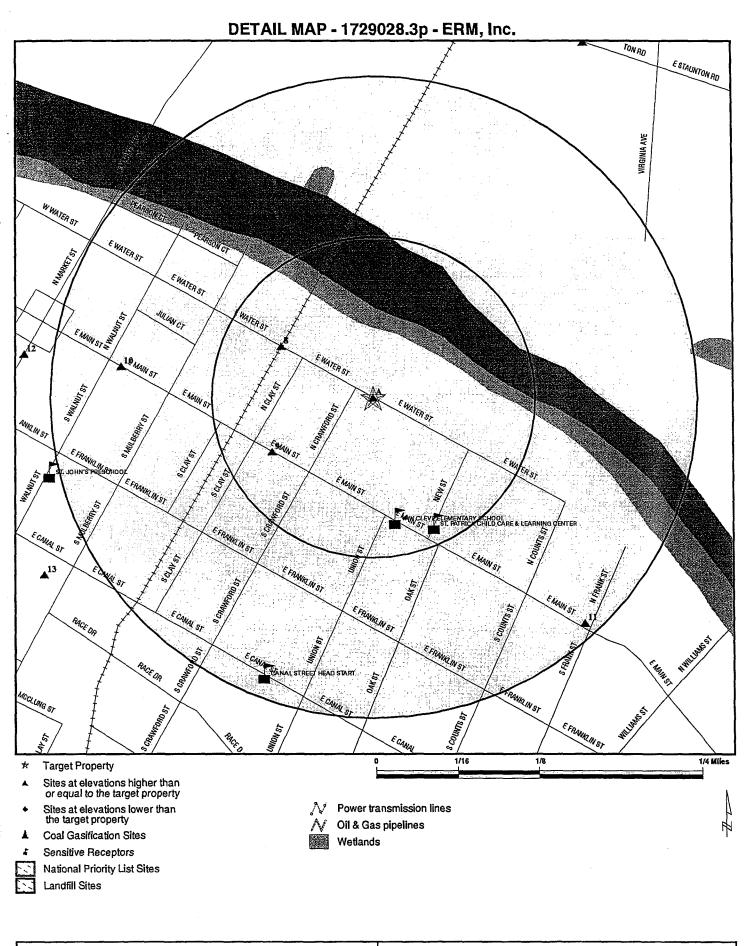
National Priority List Sites

Spinnaker Coating 518 E. Water Street Troy OH 45373 40.0389 / 84.1984 CITY/STATE/ZIP: LAT/LONG:

CUSTOMER: CONTACT: INQUIRY#:

DATE:

ERM, Inc. Leigh Anne Sievert 1729028.3p January 30, 2002 12:51 pm



TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP:

LAT/LONG:

Spinnaker Coating 518 E. Water Street Troy OH 45373 40.0389 / 84.1984 CUSTOMER: CONTACT: INQUIRY#:

DATE:

ERM, Inc. Leigh Anne Sievert 1729028.3p

January 30, 2002 12:52 pm

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement

of the ASTM standard.

### FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/22/01

Date Made Active at EDR: 12/11/01 Database Release Frequency: Semi-Annually Date of Data Arrival at EDR: 11/05/01

Elapsed ASTM days: 36

Date of Last EDR Contact: 11/05/01

**NPL Site Boundaries** 

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

**EPA Region 1** 

Telephone 617-918-1143

**EPA Region 3** 

Telephone 215-814-5418

EPA Region 4

Telephone 404-562-8033

EPA Region 6

Telephone: 214-655-6659

**EPA Region 8** 

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA Telephone: N/A

> Date of Government Version: 10/22/01 Date Made Active at EDR: 12/11/01 Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/05/01

Elapsed ASTM days: 36

Date of Last EDR Contact: 11/05/01

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities

List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/12/01 Date Made Active at EDR: 10/16/01 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 09/24/01 Elapsed ASTM days: 22

Date of Last EDR Contact: 12/26/01

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 07/12/01 Date Made Active at EDR: 10/16/01 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 09/24/01 Elapsed ASTM days: 22 Date of Last EDR Contact: 12/16/01

**CORRACTS:** Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/14/01
Date Made Active at EDR: 01/14/02
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/14/01 Elapsed ASTM days: 61

Date of Last EDR Contact: 11/14/01

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery

Act (RCRA).

Date of Government Version: 06/21/00 Date Made Active at EDR: 07/31/00 Database Release Frequency: Varies Date of Data Arrival at EDR: 07/10/00 Elapsed ASTM days: 21

Date of Last EDR Contact: 11/07/01

ERNS: Emergency Response Notification System

Source: EPA/NTIS Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 08/08/00 Date Made Active at EDR: 09/06/00 Database Release Frequency: Varies Date of Data Arrival at EDR: 08/11/00

Elapsed ASTM days: 26

Date of Last EDR Contact: 10/25/01

### FEDERAL ASTM SUPPLEMENTAL RECORDS

**BRS:** Biennial Reporting System

Source: EPA/NTIS Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99

Database Release Frequency: Biennially

Date of Last EDR Contact: 12/17/01

Date of Next Scheduled EDR Contact: 03/18/02

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A Database Release Frequency: Varies Date of Last EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: NTIS

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/30/00 Database Release Frequency: Annually

Date of Last EDR Contact: 01/07/02 Date of Next Scheduled EDR Contact: 04/08/02

**DELISTED NPL:** National Priority List Deletions

Source: EPA Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the

NPL where no further response is appropriate.

Date of Government Version: 11/13/01 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 11/05/01

Date of Next Scheduled EDR Contact: 02/04/02

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/29/01 Database Release Frequency: Quarterly Date of Last EDR Contact: 01/07/02 Date of Next Scheduled EDR Contact: 04/08/02

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4526

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 05/31/01 Database Release Frequency: Annually

Date of Last EDR Contact: 10/22/01

Date of Next Scheduled EDR Contact: 01/21/02

MLTS: Material Licensing Tracking System Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency,

EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/01 Database Release Frequency: Quarterly Date of Last EDR Contact: 01/07/02

Date of Next Scheduled EDR Contact: 04/08/02

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 08/24/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/02

Date of Next Scheduled EDR Contact: 04/01/02

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/19/01

Date of Next Scheduled EDR Contact: 02/18/02

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-260-3936

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers

of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/30/01

Database Release Frequency: Annually

Date of Last EDR Contact: 11/13/01

Date of Next Scheduled EDR Contact: 02/12/02

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/11/01

Date of Next Scheduled EDR Contact: 03/11/02

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and

land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/99

Database Release Frequency: Annually

Date of Last EDR Contact: 12/26/01

Date of Next Scheduled EDR Contact: 03/25/02

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

site.

Date of Government Version: 12/31/98

Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 10/24/01

Date of Next Scheduled EDR Contact: 01/21/02

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA,

TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 10/25/01

Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/26/01

Date of Next Scheduled EDR Contact: 03/25/02

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 10/25/01

Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/26/01

Date of Next Scheduled EDR Contact: 03/25/02

#### STATE OF OHIO ASTM STANDARD RECORDS

SHWS: Master Sites List

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2068

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 03/01/99 Date Made Active at EDR: 04/21/99

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 03/29/99

Elapsed ASTM days: 23

Date of Last EDR Contact: 12/11/01

SWF/LF: Licensed Solid Waste Facilities

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2621

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/01/01 Date Made Active at EDR: 11/28/01

Database Release Frequency: Annually

Date of Data Arrival at EDR: 11/15/01 Elapsed ASTM days: 13

Date of Last EDR Contact: 11/14/01

LUST: Leaking Underground Storage Tank File

Source: Department of Commerce Telephone: 614-752-7924

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 12/16/01 Date Made Active at EDR: 12/28/01 Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/17/01

Elapsed ASTM days: 11

Date of Last EDR Contact: 12/17/01

UST: Underground Storage Tank Tank File Source: Department of Commerce

Telephone: 614-752-7938

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 12/16/01 Date Made Active at EDR: 12/28/01 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 12/17/01

Elapsed ASTM days: 11

Date of Last EDR Contact: 12/17/01

### STATE OF OHIO ASTM SUPPLEMENTAL RECORDS

SPILLS: Emergency Response Database

Source: Ohio EPA

Telephone: 614-644-2084

All reported incidents, spills or releases to the environment.

Date of Government Version: 12/31/98 Database Release Frequency: Varies

Date of Last EDR Contact: 12/11/01

Date of Next Scheduled EDR Contact: 03/11/02

**DERR:** Division of Emergency & Remedial Response's Database

Source: Ohio EPA, Div. of Emergency Response

Telephone: 614-644-3538

Sites that may or may not have contamination.

Date of Government Version: 12/01/01 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 12/18/01
Date of Next Scheduled EDR Contact: 03/18/02

### **EDR PROPRIETARY HISTORICAL DATABASES**

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD	2							
NPL Proposed NPL CERCLIS CERC-NFRAP CORRACTS RCRIS-TSD RCRIS Lg. Quan. Gen. RCRIS Sm. Quan. Gen. ERNS	X X X	1.000 1.000 0.500 0.250 1.000 0.500 0.250 0.250 TP	0 0 0 0 0 0 0 2 NR	0 0 0 0 0 0 0 1 NR	0 0 0 NR 0 0 NR NR NR	0 NR NR 0 NR NR NR	NR NR NR NR NR NR NR NR	0 0 0 0 0 0 0
STATE ASTM STANDARD								
State Haz. Waste State Landfill LUST UST	x	1.000 0.500 0.500 0.250	0 0 0	0 0 1 0	1 0 9 NR	5 NR NR NR	NR NR NR NR	6 0 10 0
FEDERAL ASTM SUPPLEM	ENTAL							
CONSENT ROD Delisted NPL FINDS HMIRS MLTS MINES NPL Liens PADS RAATS TRIS TSCA FITS	x x	1.000 1.000 1.000 TP TP TP 0.250 TP TP TP TP TP	0 0 0 NR NR NR 0 NR NR NR NR NR NR NR	0 0 0 NR NR 0 NR NR NR NR NR	0 0 NR NR NR NR NR NR NR	0 0 0 NR NR NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR NR NR NR NR NR N	000000000000000000000000000000000000000
STATE OR LOCAL ASTM S	UPPLEMENTA	<u>L</u>						
OH Spills DERR	×	TP TP	NR NR	NR NR	NR NR	NR NR	NR NR	0 0
EDR PROPRIETARY HISTO	RICAL DATAE	BASES						
Coal Gas AQUIFLOW - see EDR Ph	nysical Setting	1.000 g Source Adde	0 endum	0	0	1	NR	1

TP = Target Property

NR = Not Requested at this Search Distance

<sup>\*</sup> Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Distance (ft.)

Site Elevation

Database(s)

EDR ID Number **EPA ID Number** 

Α1

**BROWN-BRIDGE PLANT #1** 

**Target Property** 

**518 E WATER ST** TROY, OH 45373 SHWS

S101396147 N/A

Site 1 of 7 in cluster A

SHWS:

Facility ID:

555-1490

EPA ID: Lat/Long: NOT ASSIGNED 40 02 22 / 84 11 58

Facility Type:

None

A2 **Target** Property **BROWN-BRIDGE CORPORATION** 

**518 E WATER ST** TROY, OH 45373

**FINDS** RCRIS-LQG

1000162875 45373KMBRL51

**TRIS RCRIS-TSD** 

**DERR** 

**CORRACTS** 

Site 2 of 7 in cluster A

**CORRACTS Data:** 

EPA Id: Region:

OHD088648282 5

State:

Not reported **ENTIRE FACILITY** 

Area Name: Original Scheduled Date:

Not reported

New Scheduled Date: **Actual Date:** 

Not reported 09/29/1992

Corrective Action:

CA075LO - CA Prioritization, Facility or area was assigned a low corrective

action priority

RCRIS:

Owner:

SPINNAKER INDUSTRIES INC

(214) 855-0322

Contact:

MAURICE REYNOLDS

(513) 339-0561

Record Date:

09/30/1993

Classification: Large Quantity Generator, TSDF

**BIENNIAL REPORTS:** 

Last Biennial Reporting Year: 1999

Waste

Quantity (Lbs) 2211.00 <u>Waste</u> D039

Quantity (Lbs) 43.00

D001 F003

1804.00

F005

2201.00

Used Oil Recyc: No

TSDF Activities: Not reported Violation Status: Violations exist

Regulation Violated:

Not reported

Area of Violation:

TSD-Closure/Post Closure Requirements

Date Violation Determined: Priority of Violation:

12/11/1989 Low

Schedule Date to Achieve Compliance: Actual Date Achieved Compliance:

01/10/1990 05/03/1990

**Enforcement Action:** 

Written Informal

**Enforcement Action Date:** Proposed Monetary Penalty: Final Monetary Penalty:

12/11/1989 Not reported Not reported

Regulation Violated:

Not reported

Area of Violation:

**TSD-Other Requirements** 

Map ID Direction Distance Distance (ft.) Elevation Site

### MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number** 

### **BROWN-BRIDGE CORPORATION (Continued)**

1000162875

Date Violation Determined:

Priority of Violation:

Low 06/15/1991

Schedule Date to Achieve Compliance: Actual Date Achieved Compliance:

12/30/1991

04/30/1991

Enforcement Action:

Written Informal 05/08/1991

Enforcement Action Date: Proposed Monetary Penalty:

Not reported

Final Monetary Penalty:

Not reported

Regulation Violated: Area of Violation:

Not reported Generator-All Requirements

Date Violation Determined:

03/27/1998

Priority of Violation:

Low

Schedule Date to Achieve Compliance: Actual Date Achieved Compliance:

Not reported 06/10/1998

**Enforcement Action:** 

Written Informal

**Enforcement Action Date:** 

03/30/1998 Not reported

Proposed Monetary Penalty: Final Monetary Penalty:

Not reported

There are 3 violation record(s) reported at this site:

Compliance Evaluation Inspection (CEI)

Compliance Evaluation Inspection (CEI)

Area of Violation

Date of Compliance

Other Evaluation

Generator-All Requirements 06/10/1998 **TSD-Other Requirements** 12/30/1991 TSD-Other Requirements

12/30/1991

Other Evaluation

TSD-Closure/Post Closure Requirements

05/03/1990

### FINDS:

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS)

Biennial Reporting System (BRS)

Facility Registry System (FRS)

Ohio Core database (OH\_CORE)

Permit Compliance System (PCS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

Toxic Chemical Release Inventory System (TRIS)

### DERR:

Facility Id:

555-1490

Lat/Long:

40 02 22 / 84 11 58

EPA ID:

**NOT ASSIGNED** 

Voluntary Action Program:

False

**A3 Target**  518 E WATER ST 518 E WATER ST **ERNS** 

94355803 N/A

**Property** 

TROY, OH 45373

Site 3 of 7 in cluster A

Α4 **Target** Property KIMBERLY-CLARK

**518 EAST WATER STREET** 

TROY, OH 45373

FINDS 1004056585 000007355850

Site 4 of 7 in cluster A

Map ID Direction Distance Distance (ft.) Elevation Site MAP FINDINGS

Database(s)

**EDR ID Number EPA ID Number** 

KIMBERLY-CLARK (Continued)

1004056585

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Permit Compliance System (PCS)

A5

OH Spills S103775844

**Target 518 E WATER ST** Property TROY, OH

N/A

Site 5 of 7 in cluster A

SPILLS:

Facility ID:

19980--2038

Spill Date:

0/1998

9800-00-2038

Unknown

Priority:

Date Reported

05/22/98 15:34

Spill Number: Size of Spill: Cause:

**Process Malfunction** 

Reason:

Respond When Possible or Convenient Undefined ·

Affected Area:

Air

Material:

Not reported

Type: Units:

Chemicals prior to use in the use cycle, abandoned materials Not reported

Waterway Affctd: Not reported

Spill Source:

Fixed Facility, Industry, Stack release - Air

Reportable Onty: Not reported

Name of Company or person that had spill: Not reported

Suspected Spiller:

SPINNAKER COATING 518 E WATER ST TROY, OH 45373

Not reported

Α6 Target 518 EAST WATER STREET EAST END OF PROPERTY 518 EAST WATER STREET EAST END OF PROPERTY ERNS

98438187 N/A

**Property** 

TROY, OH 45373

Carrier:

Site 6 of 7 in cluster A

**A7** 

**OH Spills** 

S103775592 N/A

**Target Property**  518 E WATER ST TROY, OH

Site 7 of 7 in cluster A

Map ID Direction Distance Distance (ft.) Elevation Site

### MAP FINDINGS

**Date Reported** 

Priority:

Reason:

Database(s)

No Response by Emergency Response

RCRIS-SQG

**FINDS** 

05/28/98 16:20

Undefined

EDR ID Number **EPA ID Number** 

(Continued)

S103775592

1000156247

OHD004268520

SPILLS:

Facility ID:

19980-2134

Spill Date: Spill Number: Size of Spill:

0/1998

9800-00-2134

Unknown

Permit Violation

Affected Area:

Post-88 surface water

Material:

Cause:

Not reported

Type:

Waste Water ie: noncontact cooling water, service water

Units: Not reported Waterway Affctd: GREAT MIAMI RIVER

Spill Source:

Fixed Facility, Industry, Waste system

Reportable Onty: Not reported

Name of Company or person that had spill: Not reported

Suspected Spiller:

KIMBERLY CLARK CORP/ BROWN BRIDGE IN

518 E WATER ST TROY, OH 45373

Carrier:

Not reported

WNW < 1/8 431 Higher **HOBART CABINET CO** 301 E WATER ST TROY, OH 45373

RCRIS:

Owner:

HOBART CABINET CO

(312) 555-1212

Contact:

**EDWARD HOBART** 

(513) 335-4666

Record Date:

03/19/1986

Classification:

Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS) Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

**WSW** < 1/8 470

Higher

**WALTZS CLEANERS** 432 E MAIN ST TROY, OH 45373

RCRIS-SQG 1000423854 **FINDS** OHD981198765 Map ID Direction Distance Distance (ft.) Elevation Site MAP FINDINGS

Database(s)

**EDR ID Number EPA ID Number** 

**WALTZS CLEANERS (Continued)** 

1000423854

LUST S104269054

RCRIS-SQG

FINDS

N/A

1000467071

OHD987002722

RCRIS:

Owner:

**BROCK ANNA** 

(312) 555-1212

Contact:

ANNA BROCK

(513) 339-4015

Record Date:

05/06/1986

Classification:

Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

10 West 1/8-1/4 1038 Higher **ERWIN CHRYSLER-PLYMOUTH DODGE, I** 

120 E MAIN ST

TROY, OH 45373

LUST:

Owner:

ERWIN CHRYSLER-PLYMOUTH DODGE, I

Facility Status:

Inactive

LTF Status:

6 Closure of regulated UST Release Number: 55003275-N00001

Owner Address: PO BOX 339

TROY, OH 45373

FR Status:

No Further Action letter issued

Old Facility Id:

553275 Former Lust Release Number: 553018500

11 SE 1/8-1/4 1264

Higher

SPEEDWAY 1030 801 N MAIN ST TROY, OH 45373

RCRIS:

Owner:

SPEEDWAY/SUPERAMERICA

(937) 322-1873

Contact:

COORD ENVIRONMENTAL

(513) 323-1192

Record Date:

12/03/1997

Classification:

Conditionally Exempt Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

TC1729028.3p Page 9

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation Site

Database(s)

EDR ID Number **EPA ID Number** 

#### SPEEDWAY 1030 (Continued)

1000467071

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

12 West 1/4-1/2 1440 Higher VERIZON NORTH, INC. **17-19 S MARKET** TROY, OH 45373

UST U003749478 LUST N/A

LUST:

Owner:

VERIZON NORTH INC

Facility Status: Inactive

1 SUS/CON from regulated UST LTF Status:

Release Number: 55007126-N00001

Owner Address: 19845 N US 31;MC:INAAAHE

WESTFIELD, IN 46074

No Further Action letter issued FR Status: Old Facility Id:

557126

Former Lust Release Number: 556003100

UST:

Facility ID:

55007126

Tank ID:

T00002

Owner: Owner Address: VERIZON NORTH INC

19845 N US 31;MC:INAAAHE

WESTFIELD, IN 46074

Capacity:

Tank Status:

CIU

Install Date: Content: Tank Type:

01/01/1996 Not reported Not reported

13 wsw 1/4-1/2 1529

Higher

**COUNTRY JUNCTION** 229 S MULBERRY ST TROY, OH 45373

S104269043 LUST

N/A

LUST:

Owner:

**COUNTRY JUNCTION** 

Facility Status: LTF Status:

Active 6 Closure of regulated UST

Release Number: 55010036-N00001 Owner Address: 229 S MULBERRY ST

TROY, OH 45373

FR Status:

Deficiency response recieved and has not been reviewed

Old Facility Id:

Former Lust Release Number: 551271300

14 NNE 1/4-1/2 1670

Higher

**ACTION GBW, INC.** 201 E STAUNTON RD TROY, OH 45373

UST U002038657 LUST N/A

Map ID Direction Distance Distance (ft.) Site Elevation

#### MAP FINDINGS

Database(s)

**EDR ID Number EPA ID Number** 

#### **ACTION GBW, INC. (Continued)**

U002038657

LUST:

Owner:

**KEVIN ACCUSSO** 

Facility Status:

Inactive

LTF Status:

6 Closure of regulated UST

Release Number: 55002314-N00001

Owner Address: 201 E STAUNTON RD

TROY, OH 45373

FR Status:

No Further Action letter issued

552314 Old Facility Id:

Former Lust Release Number: 554182300

UST:

Facility ID:

55002314

Tank ID:

Tank Status:

T00001

Owner:

ACTION GBW, INC. 201 E STAUNTON RD

TROY, OH 45373

Capacity:

6000

CIU

Install Date:

Owner Address:

10/01/1994

Kerosene

Content: Tank Type:

Fiberglass Reinforced Plastic

Tank ID:

T00002

Facility ID: Owner:

ACTION GBW, INC.

Owner Address:

201 E STAUNTON RD

TROY, OH 45373

Capacity:

6000

Tank Status:

CIU

Install Date: Content:

10/01/1994

Diesel

Fiberglass Reinforced Plastic Tank Type:

55002314

Tank ID:

Tank Status:

T00003

CIU

Facility ID: Owner: Owner Address:

ACTION GBW, INC. 201 E STAUNTON RD

TROY, OH 45373

Capacity: Install Date: 12000

Content:

10/01/1994

Tank Type:

Gasoline

Fiberglass Reinforced Plastic

Facility ID:

55002314

Owner: Owner Address:

ACTION GBW, INC.

201 E STAUNTON RD

TROY, OH 45373

8000

Tank Status:

Tank ID:

CIU

T00004

Capacity: Install Date:

10/01/1994

Content:

Gasoline

Tank Type:

Fiberglass Reinforced Plastic

15 NNE 1/4-1/2 1697 Higher TROY WELL FIELD / UNK SOURCE

300 E STAUNTON RD

TROY, OH 45373

SHWS:

Facility ID:

555-1353

EPA ID: Lat/Long: **NOT ASSIGNED** 40 02 55 / 84 12 25

Facility Type:

Contaminated Public Water Supply

S103686367

N/A

SHWS

DERR

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation

Database(s)

LUST

LUST

LUST

**EDR ID Number EPA ID Number** 

TROY WELL FIELD / UNK SOURCE (Continued)

S103686367

S104257485

S104269051

S104257470

N/A

N/A

N/A

DERR:

Facility Id:

Lat/Long:

40 02 55 / 84 12 25

EPA ID:

OHSFN0507962

555-1353

Voluntary Action Program:

False

16 **WSW** 1/4-1/2 1761 Higher TROY FIRE DEPT **18 E CANAL ST** 

TROY, OH 45373

LUST:

Owner: Facility Status: TROY FIRE DEPT

Inactive

LTF Status:

1 SUS/CON from regulated UST

Release Number: 55010007-N00001 Owner Address: 18 E CANAL ST

TROY, OH 45373

FR Status:

No Further Action letter issued

Old Facility Id:

Former Lust Release Number: 550089700

17 WNW 1/4-1/2 1937

RIVER CORRIDOR OFFICE

209 W WATER ST TROY, OH 45373

Higher

LUST:

Owner:

RIVER CORRIDOR OFFICE

**Facility Status:** 

Inactive

LTF Status:

6 Closure of regulated UST

Release Number: 55010042-N00001 Owner Address: 209 W WATER ST

TROY, OH 45373

FR Status:

No Further Action letter issued

Old Facility Id:

Former Lust Release Number: 552223300

18 NE 1/4-1/2 1955 Higher MIAMI SHORES GOLF COURSE

**402 E STAUNTON RD** TROY, OH 45373

LUST:

Owner:

MIAMI SHORES GOLF COURSE

Facility Status:

Inactive

LTF Status:

6 Closure of regulated UST

Release Number: 55009994-N00001 Owner Address: 402 E STAUNTON RD

TROY, OH 45373

FR Status:

No Further Action letter issued

Old Facility Id:

Former Lust Release Number: 550012300

0

TC1729028.3p Page 12

MAP FINDINGS Map ID Direction Distance **EDR ID Number** Distance (ft.) Database(s) **EPA ID Number** Site Elevation LUST S104257455 19. **FORMER AVEY SERVICE** N/A 430 S CRAWFORD SSW 1/4-1/2 TROY, OH 45373 2191 Higher LUST: FORMER AVEY SERVICE Owner: Facility Status: Active 6 Closure of regulated UST LTF Status: Release Number: 55010078-N00001 Owner Address: 430 S CRAWFORD TROY, OH 45373 FR Status: A possible incident is reported Old Facility Id: Former Lust Release Number: 55939400 LUST S104257465 **RAYS TUNE UP** 20 N/A WNW 15 N OXFORD TROY, OH 45373 1/4-1/2 2549 Higher LUST: RAYS TUNE UP Owner: Facility Status: Inactive 1 SUS/CON from regulated UST LTF Status: Release Number: 55010084-N00001 Owner Address: 15 N OXFORD TROY, OH 45373 No Further Action letter issued FR Status: Old Facility Id: Former Lust Release Number: 55993400 LUST S104778085 **B21** JONES TRANSFER CO. N/A SSW 707 S CRAWFORD ST TROY, OH 45373 1/4-1/2 2623 Site 1 of 2 in cluster B Higher LUST: JONES TRANSFER CO. Owner: Facility Status: Active LTF Status: 6 Closure of regulated UST Release Number: 55000006-N00001 Owner Address: 24901 NORTHWESTERN HWY STE 502 SOUTHFIELD, MI 48075 FR Status: No closure report received letter sent Old Facility Id: 550006 Former Lust Release Number: 553201500 1000440665 SHWS **B22** TROY RAILROAD DEPOT **DERR** N/A SSW **EAST WEST ST** 

1/2-1

2694

Higher

TROY, OH 45373

Site 2 of 2 in cluster B

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation Site

Database(s)

**EDR ID Number EPA ID Number** 

TROY RAILROAD DEPOT (Continued)

1000440665

SHWS:

Facility ID:

555-0822

EPA ID: Lat/Long: OHD981537574 40 01 52 / 84 12 05

Facility Type:

None

DERR:

555-0822

Facility Id: Lat/Long:

40 01 52 / 84 12 05

EPA ID:

OHD981537574

Voluntary Action Program:

False

23 SSW **IVEX CORP** 

SHWS

S100779271 N/A

1/2-1 3123

**421 UNION ST** 

TROY, OH 45373

Higher

SHWS:

Facility ID:

555-1242

EPA ID:

NOT ASSIGNED 40 01 54 / 84 12 02

Lat/Long: Facility Type:

None

24 WSW 1/2-1 3897

**HOBART CORP TROY SUNSHADE CO DIV** 

TROY, OH 45373

Higher

750 LINCOLN AVE

**FINDS** 

1000156222 OHD004474466

**RCRIS-LQG CERC-NFRAP** 

SHWS

**DERR** 

**CERCLIS-NFRAP Classification Data:** 

Site Incident Category: Not reported

**NFRAP** 

Federal Facility: Not a Federal Facility

Non NPL Code: Ownership Status: **CERCLIS-NFRAP Assessment History:** 

Other

**NPL Status:** 

Not on the NPL

Assessment: Assessment:

DISCOVERY

PRELIMINARY ASSESSMENT

Completed: Completed:

08/01/1980 06/30/1987

RCRIS:

Owner:

HOBART CORP

(937) 332-3000

Contact:

JAMES CARLETON

(513) 335-7171

Record Date:

Large Quantity Generator, Conditionally Exempt Small Quantity Generator, Hazardous Waste Transporter Classification: Used Oil Recyc: No

Violation Status: No violations found

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS)

Facility Registry System (FRS)

Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

Map ID Direction Distance Distance (ft.)

Elevation

MAP FINDINGS

Database(s)

**EDR ID Number EPA ID Number** 

#### **HOBART CORP TROY SUNSHADE CO DIV (Continued)**

1000156222

SHWS:

Site

Facility ID:

555-0400

EPA ID: Lat/Long: OHD004474466 40 02 00 / 84 12 40

Facility Type:

None

DERR:

Facility Id:

555-0400

Lat/Long:

40 02 00 / 84 12 40

EPA ID:

OHD004474466

Voluntary Action Program:

25 SSW TROY GAS CO.

1/2-1

**1318 CLAY STREET** TROY, OH 45373

Coal Gas

G000000885

N/A

4817 Higher

COAL GAS SITE DESCRIPTION:

1887 Troy Gas Works is located on the southwest bank of the Great Miami River, o de of Clay Street, north of E. Water Street. Site is on the southeast side of t 1898, site is called Miami Valley Gas and Fule Co. 1905, not in operation. By tilling Co. is on site. By 193l, pump house is on site.

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26

NW 1/2-1 4864 **HOBART BROS CO** BTWN 439 / 507 N ELM ST

TROY, OH 45373

SHWS S100037511 **DERR** N/A

Higher

SHWS:

Facility ID:

555-0450

EPA ID:

OHD980612279

Lat/Long: Facility Type: 40 02 57 / 84 12 38

None

DERR:

Facility Id:

555-0450

Lat/Long:

40 02 57 / 84 12 38

EPA ID:

OHD980612279 Voluntary Action Program: False

27 NW

WAMPLER BUICK-GMC INC. 507 N ELM ST

SHWS S100779272

DERR N/A

1/2-1 5173 TROY, OH 45373

Higher

SHWS:

Facility ID:

555-1407

EPA ID: Lat/Long: **NOT ASSIGNED** 40 02 57 / 84 12 43

Facility Type:

Contaminated Public Water Supply, Active

DERR:

Facility Id:

555-1407

Lat/Long:

40 02 57 / 84 12 43

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S100779272

WAMPLER BUICK-GMC INC. (Continued)

EPA ID:

NOT ASSIGNED

Voluntary Action Program:

alse

#### ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
ALCONY	S104257540	MAXINE DAVIS	₁√ <b>7997 RT 4</b> 1	45373	LUST	
TROY	<b>4.1-1-1</b>	FORMER GAS STA	SR 55 / SR 718	45373	LUST	
TROY	1000440859		BIG FOUR RR AND CRAWFORD	45373	RCRIS-SQG, FINDS	
	S103686363		TOYE MILL RD	45373	SHWS, DERR	555-0253
TROY		HOBART BROS METAL FILLER DUMP	∠ĹYTLE RD	45373	SHWS, DERR	555-0390
TROY		•	2423 W MARKET ST SR 55	45373	LUST	
TROY	\$104778121		∠4007 W SR 718		LUST	
TROY	\$104257479		2678 W SR 718		LUST	
TROY	S104257481		<u> </u>	45373		55000086
TROY	U003749476		1-75 / ST.RT. 41 (A)		CERC-NFRAP	220000
TROY	1003872396	•	SOUTH UNION STREET		LUST	
TROY	S104257487		5760 E WALNUT GROVE RD			
TROY	1003872403	TROY RAILROAD SITE	EAST WEST STREET	45373	CERC-NFRAP	

## **EPA Waste Codes Addendum**

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D039	TETRACHLOROETHYLENE
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

#### GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

#### TARGET PROPERTY ADDRESS

SPINNAKER COATING **518 E. WATER STREET** TROY, OH 45373

#### TARGET PROPERTY COORDINATES

Latitude (North):

40,038898 - 40° 2' 20.0"

Longitude (West):

84.198402 - 84° 11' 54.2"

Universal Tranverse Mercator:

Zone 16

739030.9

UTM X (Meters): UTM Y (Meters):

4435625.5

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

#### **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

#### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property:

2440084-A2 TROY, OH

Source: USGS 7.5 min quad index

#### GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property:

General East

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

#### **FEMA FLOOD ZONE**

FEMA Flood

Target Property County MIAMI, OH

Electronic Data
Not Available

Flood Plain Panel at Target Property:

Not Reported

Additional Panels in search area:

Not Reported

NATIONAL WETLAND INVENTORY

**NWI Electronic** 

NWI Quad at Target Property

Data Coverage

TROY

YES - refer to the Overview Map and Detail Map

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### **AQUIFLOW®**

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

> LOCATION FROM TP

GENERAL DIRECTION GROUNDWATER FLOW

MAP ID

Not Reported

#### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

Era:

Paleozoic

Category: Stratified Sequence

System:

Ordovician

Series:

Upper Ordovician (Cincinnatian)

O3 (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec. Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:

**ELDEAN** 

Soil Surface Texture:

loam

Hydrologic Group:

Class B - Moderate infiltration rates. Deep and moderately deep. moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class:

Well drained. Soils have intermediate water holding capacity. Depth to

water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min:

> 60 inches

Depth to Bedrock Max:

> 60 inches

	Soil Layer Information						
	Boundary Classification						
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	12 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.60
2	12 inches	23 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.20	Max: 7.80 Min: 5.60
3	23 inches	30 inches	very gravelly - clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 8.40 Min: 6.60
4	30 inches	60 inches	stratified	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COURSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 20.00 Min: 6.00	Max: 8.40 Min: 7.40

#### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: clay loam

silt loam silty clay loam

Surficial Soil Types:

clay loam silt loam silty clay loam

Shallow Soil Types:

silty clay loam clay loam silt loam sandy clay loam

Deeper Soil Types:

gravelly - coarse sand

sand and gravel clay loam loam

#### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

DATABASE
----------

SEARCH DISTANCE (miles)

Federal USGS

1.000

Federal FRDS PWS

Nearest PWS within 1 mile

State Database

1.000

#### FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	400221084114600	1/8 - 1/4 Mile East
A2	400221084114500	1/8 - 1/4 Mile East
A3	400222084114300	1/8 - 1/4 Mile ENE
A5	400217084113800	1/8 - 1/4 Mile ESE
B6	400213084113600	1/4 - 1/2 Mile ESE
B7	400208084112900	1/4 - 1/2 Mile ESE
9	400239084122000	1/2 - 1 Mile NW
10	400249084122800	1/2 - 1 Mile NW
12	400136084112300	1/2 - 1 Mile SSE

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

	•	LOCATION
MAP ID	WELL ID	FROM TP
4	OH5531312	1/8 - 1/4 Mile West

Note: PWS System location is not always the same as well location.

#### STATE DATABASE WELL INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP

#### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
8	5501612	1/4 - 1/2 Mile ESE
11	5502303	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 1729028.3p WMAINST ESTATE ROUTE 55 YUNN ST STAUNTON RD MCKAIG AVE STATE ROUTE 718 Editora De la Contraction de l STATE ROUTE 41 E 1/2 2 Miles Major Roads Contour Lines Earthquake epicenter, Richter 5 or greater 8 Water Wells **(P) Public Water Supply Wells** Groundwater Flow Direction Indeterminate Groundwater Flow at Location (CI)

TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG:

GV Groundwater Flow Varies at Location
Cluster of Multiple Icons

Spinnaker Coating 518 E. Water Street Troy OH 45373 40.0389 / 84.1984 CUSTOMER: CONTACT: ERM, Inc. Leigh Anne Sievert

INQUIRY #: 1729028.3p DATE: 1729028.3p

1729028.3p January 30, 2002 12:52 pm

#### GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation

Database

EDR ID Number

Α1 East

1/8 - 1/4 Mile Higher

**FED USGS** 

400221084114600

**BASIC WELL DATA** 

Site Type: Year Constructed: Single well, other than collector or Ranney type

1966

County: State:

Miami Ohio

Altitude: Well Depth: 824.00 ft. 100.00 ft.

Topographic Setting: Prim. Use of Site:

Valley flat Test

Depth to Water Table: Date Measured:

12.00 ft. 12011966

Prim. Use of Water:

Unused

A2 1/8 - 1/4 Mile Higher

**FED USGS** 

400221084114500

**BASIC WELL DATA** 

Site Type:

Year Constructed:

Single well, other than collector or Ranney type 1966

County:

Miami

Altitude: Well Depth: 825.00 ft. 166.00 ft. State: Topographic Setting:

Ohio Valley flat

Depth to Water Table: Date Measured:

12.00 ft. 12011966 Prim. Use of Site: Prim. Use of Water:

Test Unused

ENE 1/8 - 1/4 Mile Higher

**FED USGS** 

400222084114300

**BASIC WELL DATA** 

Site Type: Year Constructed:

Single well, other than collector or Ranney type

1966

County:

Miami Ohio

Altitude: Well Depth: 825.00 ft. 100.00 ft. State: Topographic Setting:

Valley flat

Depth to Water Table: Date Measured:

6.00 ft. 12011966 Prim. Use of Site: Prim. Use of Water:

Test Unused

4 West 1/8 - 1/4 Mile Higher

**FRDS PWS** 

OH5531312

PWS ID:

OH5531312

PWS Status:

Active Date Deactivated: Not Reported

Date Initiated: **PWS Name:** 

Not Reported

**DOLPHIN SWIM CLUB** 

MANAGER

**2250 STATE ROUTE 718** TROY, OH 45373

Addressee / Facility:

Not Reported

#### GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Facility Latitude:

40 02 21

Facility Longitude 084 12 11

City Served: Treatment Class: Not Reported Treated

Population:

300

PWS currently has or had major violation(s) or enforcement:

Yes

Violations information not reported.

#### **ENFORCEMENT INFORMATION:**

System Name:

**DOLPHIN SWIM CLUB** 

Violation Type:

Monitoring, Routine Major (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1995-04-01 - 1995-06-30

Violation ID:

9505217

Analytical Value: Enforcement ID:

00000000.00 9504188

Enforcement Date:

1995-07-19

Enf. Action:

State Violation/Reminder Notice

System Name: Violation Type: **DOLPHIN SWIM CLUB** 

Monitoring, Routine Major (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1995-04-01 - 1995-06-30

9505217

Analytical Value: Enforcement ID:

Analytical Value:

Enforcement ID:

Enf. Action:

00.000000.00 9504189

00.000000.00

9504190

Violation ID: **Enforcement Date:** 

1995-07-19

Enf. Action:

State Public Notif Requested

State Public Notif Received

System Name:

**DOLPHIN SWIM CLUB** 

Violation Type:

Monitoring, Routine Major (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1995-04-01 - 1995-06-30

9505217

Violation ID:

**Enforcement Date:** 

1995-07-20 DOLPHIN SWIM CLUB

System Name: Violation Type:

Max Contaminant Level, Acute (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1998-04-01 - 1998-06-30

Violation ID:

98040522

**Enforcement Date:** 

1998-06-01 S

Analytical Value: Enforcement ID:

0000000.000000000 98013272

Enf. Action:

FH

System Name:

**DOLPHIN SWIM CLUB** 

Violation Type:

Max Contaminant Level, Acute (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1998-04-01 - 1998-06-30

Analytical Value:

0000000.000000000

Violation ID:

98040522 1998-06-01 S

98013273 Enforcement ID:

Enf. Action: łΑ

**Enforcement Date:** System Name: Violation Type:

**DOLPHIN SWIM CLUB** 

Max Contaminant Level, Acute (TCR)

COLIFORM (TCR)

Contaminant: Compliance Period:

1998-04-01 - 1998-06-30

Analytical Value:

0000000.000000000

Violation ID:

98040337

Enforcement ID: Enf. Action:

98013270

ΙE

**Enforcement Date:** 

1998-06-01 S

DOLPHIN SWIM CLUB

System Name: Violation Type:

Max Contaminant Level, Acute (TCR)

Contaminant:

Enforcement Date:

COLIFORM (TCR)

1998-04-01 - 1998-06-30

Analytical Value:

0000000.000000000

Compliance Period: Violation ID:

98040522 1998-06-24 S Enforcement ID: Enf. Action:

98013271 IF

#### GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

#### **ENFORCEMENT INFORMATION:**

System Name:

**DOLPHIN SWIM CLUB** 

Violation Type:

Max Contaminant Level, Monthly (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1998-04-01 - 1998-06-30

98040522

Analytical Value: Enforcement ID:

IA

0000000.000000000

Violation ID: Enforcement Date:

1998-06-01 S

Enf. Action:

98013273

System Name:

**DOLPHIN SWIM CLUB** 

Violation Type:

Max Contaminant Level, Monthly (TCR)

Contaminant: Compliance Period: COLIFORM (TCR)

1998-04-01 - 1998-06-30

Analytical Value: Enforcement ID: 0000000.000000000

Violation ID: **Enforcement Date:**  98040338 1998-06-01 S Enf. Action:

98013270 1E

System Name:

**DOLPHIN SWIM CLUB** 

Violation Type: Contaminant:

Max Contaminant Level, Monthly (TCR)

Compliance Period:

COLIFORM (TCR)

1998-04-01 - 1998-06-30

Analytical Value:

0000000.000000000

Violation ID:

98040522

Enforcement ID: Enf. Action:

98013271 IF

Enforcement Date:

1998-06-24 S

**DOLPHIN SWIM CLUB** 

Monitoring, Routine Major (TCR)

Violation Type: Contaminant:

COLIFORM (TCR)

1998-04-01 - 1998-06-30

98040522

Analytical Value: Enf. Action:

0000000.000000000

Violation ID:

System Name:

1998-08-04 S

Enforcement ID:

98013684

IA

**Enforcement Date:** 

Compliance Period:

**DOLPHIN SWIM CLUB** 

System Name: Violation Type:

Monitoring, Routine Major (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

1998-04-01 - 1998-06-30

Violation ID:

98040522 1998-08-04 S Analytical Value:

0000000.000000000

Enforcement ID:

98013685

Enf. Action:

ΙE

**Enforcement Date:** System Name:

**DOLPHIN SWIM CLUB** 

Violation Type:

Violation ID:

Monitoring, Routine Major (TCR)

Contaminant:

COLIFORM (TCR)

Compliance Period:

Enforcement Date:

1998-04-01 - 1998-06-30

Analytical Value: Enforcement ID:

0000000.000000000

98040522 1998-08-20 S

Enf. Action:

98013686 IF

**ESE** 1/8 - 1/4 Mile

Higher

**FED USGS** 

400217084113800

**BASIC WELL DATA** 

Site Type:

Single well, other than collector or Ranney type

Year Constructed:

1966

County:

Miami

Altitude:

821.00 ft. 125.00 ft. State:

Ohio Topographic Setting: Valley flat

Well Depth: Depth to Water Table: Date Measured:

10.00 ft. 12011966 Prim. Use of Site: Prim. Use of Water:

Test Unused

### GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction

Distance Elevation

Database

EDR ID Number

Higher

1/4 - 1/2 Mile

**FED USGS** 

400213084113600

**BASIC WELL DATA** 

Year Constructed:

Date Measured:

Depth to Water Table:

Site Type:

Well Depth:

Altitude:

Single well, other than collector or Ranney type

1966 828.00 ft.

134.00 ft. 14.00 ft. 12011966 County: State:

Topographic Setting: Prim. Use of Site:

Miami Ohio Valley flat

Test Prim. Use of Water: Unused

**B7** ESE

1/4 - 1/2 Mile Higher

**FED USGS** 

**OH WELLS** 

**FED USGS** 

400208084112900

5501612

**BASIC WELL DATA** 

Site Type:

Year Constructed: Altitude:

Well Depth:

Depth to Water Table: Date Measured:

Single well, other than collector or Ranney type

1973 820.00 ft.

105.00 ft. Not Reported

Not Reported

County: State:

Topographic Setting: Prim. Use of Site: Prim. Use of Water:

Miami Ohio

Not Reported Withdrawal of water Public supply

ĒSE 1/4 - 1/2 Mile

Higher

PWS ID: Latitude:

Owner: Source: 5501612 0400207 TROY, CITY OF

Ground

Population Served: Longitude:

20,250 0841128

NW 1/2 - 1 Mile Higher

**BASIC WELL DATA** 

Site Type:

Year Constructed:

Altitude: Well Depth:

Depth to Water Table: Date Measured:

1950 825.00 ft.

Not Reported Not Reported Not Reported

Single well, other than collector or Ranney type County:

State: Topographic Setting: Prim. Use of Site: Prim. Use of Water:

Miami Ohio

Valley flat Withdrawal of water Public supply

NW 1/2 - 1 Mile Higher

**FED USGS** 

400249084122800

400239084122000

#### **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS**

#### **BASIC WELL DATA**

Site Type:

Single well, other than collector or Ranney type

Year Constructed:

1962

Miami

Altitude: Well Depth: 827.00 ft.

State:

Ohio

Depth to Water Table:

177.00 ft. 14.00 ft.

Topographic Setting: Prim. Use of Site:

Valley flat

Date Measured:

10061962

Prim. Use of Water:

Withdrawal of water Public supply

11 NW 1/2 - 1 Mile Higher

**OH WELLS** 

5502303

PWS ID:

5502303

Population Served: Longitude:

120

Latitude: Owner: Source:

0400251

MIAMI CO-N25A EXTENSION **Purchased Ground Water** 

0841245

12 SSE 1/2 - 1 Mile Higher

**FED USGS** 

400136084112300

**BASIC WELL DATA** 

Single well, other than collector or Ranney type

Site Type: Year Constructed:

Not Reported

County:

Miami

Altitude:

824.00 ft.

Ohio

Well Depth:

Not Reported

State:

Valley flat

Depth to Water Table:

Not Reported

Topographic Setting: Prim. Use of Site:

Withdrawal of water

Date Measured:

Not Reported

Prim. Use of Water:

Industrial

## GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

#### AREA RADON INFORMATION

Federal EPA Radon Zone for MIAMI County: 1

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Zip Code: 45373

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	8.280 pCi/L	20%	80%	0%

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

#### HYDROGEOLOGIC INFORMATION

#### AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### **GEOLOGIC INFORMATION**

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

#### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

#### **FEDERAL WATER WELLS**

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### STATE RECORDS

**Ohio Public Water Systems** 

Source: Ohio EPA, Division of Drinking and Groundwater

Telephone: 614-644-2752

#### **RADON**

**Area Radon Information:** The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

**EPA Radon Zones:** Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

#### **OTHER**

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Appendix H EDR Database Search Results for Plant No. 2



# The EDR Radius Map with GeoCheck®

Spinnaker Coating 30 Mary Bill Drive Troy, OH 45373

Inquiry Number: 1729029.3p

**January 30, 2002** 

## The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06490

**Nationwide Customer Service** 

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

#### TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	5
Orphan Summary	11
EPA Waste Codes	EPA-1
Government Records Searched/Data Currency Tracking	GR-1
GEOCHECK ADDENDUM	
Physical Setting Source Addendum.	A-1
Physical Setting Source Summary.	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-10

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

30 MARY BILL DRIVE TROY, OH 45373

#### COORDINATES

Latitude (North):

40.059700 - 40° 3' 34.9"

Longitude (West):

84.244300 - 84\* 14' 39.5"

Universal Tranverse Mercator: Zone 16

UTM X (Meters):

735042.7

UTM Y (Meters):

4437812.5

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:

2440084-A2 TROY, OH

Source:

USGS 7.5 min quad index

#### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 5 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SPINNAKER COATING 30 MARY BILL DR TROY, OH 45373	FINDS RCRIS-LQG	OHD980569263

#### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ( "reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

#### FEDERAL ASTM STANDARD

NPL...... National Priority List

Proposed NPL Proposed National Priority List Sites

CERCLIS\_\_\_\_\_Comprehensive Environmental Response, Compensation, and Liability Information

System CORRACTS Corrective Action Report

RCRIS-TSD...... Resource Conservation and Recovery Information System

ERNS..... Emergency Response Notification System

#### STATE ASTM STANDARD

SWF/LF.....Licensed Solid Waste Facilities

#### FEDERAL ASTM SUPPLEMENTAL

CONSENT...... Superfund (CERCLA) Consent Decrees

ROD...... Records Of Decision

Delisted NPL...... National Priority List Deletions

HMIRS..... Hazardous Materials Information Reporting System

MLTS..... Material Licensing Tracking System

MINES...... Mines Master Index File

NPL Liens..... Federal Superfund Liens

PADS....... PCB Activity Database System

RAATS......RCRA Administrative Action Tracking System
TRIS.......Toxic Chemical Release Inventory System

TSCA...... Toxic Substances Control Act

FTTS.......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, &

. Rodenticide Act)/TSCA (Toxic Substances Control Act)

#### STATE OR LOCAL ASTM SUPPLEMENTAL

OH Spills..... Emergency Response Database

DERR...... Division of Emergency & Remedial Response's Database

#### **EDR PROPRIETARY HISTORICAL DATABASES**

Coal Gas...... Former Manufactured Gas (Coal Gas) Sites

#### **SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

#### FEDERAL ASTM STANDARD

CERCLIS-NFRAP: As of February 1995. CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

A review of the CERC-NFRAP list, as provided by EDR, and dated 07/12/2001 has revealed that there is 1 CERC-NFRAP site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CHROMPARTS INC	35 MARY BILL DR BLDG D	0 - 1/8 NNW	2	5

**RCRIS:** The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 06/21/2000 has revealed that there are 5 RCRIS-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page	
CHROMPARTS INC DATAJAM CORP KIMBERLY CLARK CORP BROWN-BRID TROY MAINTENANCE FACILITY CITY VEDO TROY	35 MARY BILL DR BLDG D 15 MARYBILL DR MARYBILL DRIVE 1400 EXPERIMENT FARM RD 1300 1300 EXPERIMENT FA	0 - 1/8 NNW 0 - 1/8 S 1/8 - 1/4S 1/8 - 1/4E 1/8 - 1/4SE	2 3 4 5	5 6 6 7 8	

#### STATE ASTM STANDARD

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Ohio Environmental Protection Agency's Master Sites List.

A review of the SHWS list, as provided by EDR, has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CHROMPARTS INC	35 MARY BILL DR BLDG D	0 - 1/8 NNW	2	5

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the LUST list, as provided by EDR, and dated 12/16/2001 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
FRIENDLY ICE CREAM CORP.	1903 W MAIN ST	7	A7	8
SPEEDWAY #5298	1894 W MAIN ST		A8	9

**UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Commerce Division of State Fire Marshal's Facility File.

A review of the UST list, as provided by EDR, and dated 12/16/2001 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
TROY MAINTENANCE FACILITY CITY	1400 EXPERIMENT FARM RD	1/8 - 1/4E	5	7

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
DYE MILL RD LANDFILL	SHWS, DERR
HOBART BROS METAL FILLER DUMP	SHWS, DERR
MAXINE DAVIS	LUST
FORMER GAS STA	LUST
ODOT MAINTENANCE GARAGE	LUST
WAGNER PLUMBING & HEATING	LUST
CONCORD TWP GARAGE	LUST
TRUE NORTH #809	UST

OVERVIEW MAP - 1729029.3p - ERM, Inc. 1/4 1/2 1 Miles **Target Property** Sites at elevations higher than or equal to the target property Sites at elevations lower than the target property Power transmission lines Oil & Gas pipelines Coal Gasification Sites Wetlands National Priority List Sites Landfill Sites

TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG: Spinnaker Coating 30 Mary Bill Drive Troy OH 45373 40.0597 / 84.2443

CUSTOMER: CONTACT: INQUIRY #: DATE: ERM, Inc. Leigh Sievert 1729029.3p

1729029.3p January 30, 2002 12:28 pm

**DETAIL MAP - 1729029.3p - ERM, Inc.** MARYBILL DR HIGHLAND C RD DR **WESTHAVEN DR** 1/16 **Target Property** Sites at elevations higher than or equal to the target property Sites at elevations lower than the target property Power transmission lines Oil & Gas pipelines Coal Gasification Sites Wetlands Sensitive Receptors National Priority List Sites Landfill Sites Spinnaker Coating

TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG:

30 Mary Bill Drive Troy OH 45373 40.0597 / 84.2443

CUSTOMER: CONTACT: INQUIRY #: DATE:

ERM, Inc. Leigh Sievert 1729029.3p January 30, 2002 12:28 pm

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARI	2							
NPL Proposed NPL CERCLIS CERC-NFRAP CORRACTS RCRIS-TSD RCRIS Lg. Quan. Gen. RCRIS Sm. Quan. Gen. ERNS	X	1.000 1.000 0.500 0.250 1.000 0.500 0.250 0.250	0 0 0 1 0 0 0 2 NR	0 0 0 0 0 0 0 3 NR	0 0 0 NR 0 0 NR NR NR	0 0 NR NR 0 NR NR NR	NR NR NR NR NR NR NR NR	0 0 0 1 0 0 0 5
STATE ASTM STANDARD								
State Haz. Waste State Landfill LUST UST		1.000 0.500 0.500 0.250	1 0 0 0	0 0 0 1	0 0 2 NR	0 NR NR NR	NR NR NR NR	1 0 2 1
FEDERAL ASTM SUPPLEM	ENTAL							
CONSENT ROD Delisted NPL FINDS HMIRS MLTS MINES NPL Liens PADS RAATS TRIS TSCA FTTS	X	1.000 1.000 1.000 TP TP TP 0.250 TP TP TP TP TP	0 0 0 R R R R R R R R R R R R R R R R R	0 0 0 RR NR 0 RR	0 0 0 RRR RR	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NR NR NR NR NR NR NR NR NR NR NR NR NR N	000000000000000000000000000000000000000
STATE OR LOCAL ASTM SUPPLEMENTAL								
OH Spills DERR		TP TP	NR NR	NR NR	NR NR	NR NR	NR NR	0 0
EDR PROPRIETARY HISTORICAL DATABASES								
Coal Gas AQUIFLOW - see EDR Ph	ysical Setting	1.000 Source Adde	0 endum	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

<sup>\*</sup> Sites may be listed in more than one database

Map ID Direction Distance Distance (ft.)

Site

Elevation

MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number** 

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

**Target** 

SPINNAKER COATING 30 MARY BILL DR

FINDS RCRIS-LQG

1000162876 OHD980569263

Property

TROY, OH 45373

RCRIS:

Owner:

SPINNAKER INDUSTRIES INC

(214) 855-0322

Contact:

RICHARD OWENS

(513) 339-0561

Record Date:

09/08/1998

Classification:

Large Quantity Generator

**BIENNIAL REPORTS:** 

Last Biennial Reporting Year: 1999

**Waste** 

Quantity (Lbs)

**Waste** 

Quantity (Lbs)

D001

466.00

D039

65.00

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS) Biennial Reporting System (BRS) Facility Registry System (FRS) Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

Toxic Chemical Release Inventory System (TRIS)

NNW < 1/8 142

Higher

**CHROMPARTS INC** 35 MARY BILL DR BLDG D

TROY, OH 45373

RCRIS-SQG **FINDS** CERC-NFRAP 1000335086 OHT400012514

SHWS DERR

**CERCLIS-NFRAP Classification Data:** Site Incident Category: Not reported

Non NPL Code: **NFRAP** 

Ownership Status: Other

CERCLIS-NFRAP Assessment History:

Assessment: Assessment: Assessment: DISCOVERY PRELIMINARY ASSESSMENT PRELIMINARY ASSESSMENT NPL Status:

Not on the NPL 06/01/1981

Federal Facility: Not a Federal Facility

Completed: Completed: Completed:

06/30/1987 03/28/1990

# MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

**CHROMPARTS INC (Continued)** 

1000335086

RCRIS:

Owner:

CHROMPARTS INC

(312) 555-1212

Contact:

DEAN CLINEFELTER

(513) 335-3333

Record Date: Classification: 11/15/1980 Not reported

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

SHWS:

Facility ID:

555-0166

EPA ID:

OHT400012514

Lat/Long:

40 03 30 / 84 14 10

Facility Type:

None

DERR:

Facility Id:

555-0166

Lat/Long:

40 03 30 / 84 14 10

EPA ID:

OHT400012514

Voluntary Action Program:

False

3 South < 1/8 385 Higher DATAJAM CORP 15 MARYBILL DR TROY, OH 45373 RCRIS-SQG 1000146994 FINDS OHD085511590

RCRIS:

Owner:

DATAJAM CORP

(312) 555-1212

Contact:

DON BIRDSALL

(513) 339-5550

Record Date:

08/18/1980

Classification:

Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Resource Conservation and Recovery Act Information system (RCRAINFO)

4 South 1/8-1/4

732 Higher KIMBERLY CLARK CORP BROWN-BRIDGE DIV 2

MARYBILL DRIVE

TROY, OH 45373

RCRIS-SQG 1000162878

OHT400011664

MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number** 

# KIMBERLY CLARK CORP BROWN-BRIDGE DIV 2 (Continued)

1000162878

RCRIS:

Owner:

NAME NOT REPORTED

(312) 555-1212

Contact:

**ENVIRONMENTAL COORDINATOR** 

(312) 555-1212

Record Date:

Not reported

Classification:

Not reported

Used Oil Recyc: No

Violation Status: No violations found

5 East 1/8-1/4 1002 Higher TROY MAINTENANCE FACILITY CITY OF 1400 EXPERIMENT FARM RD

TROY, OH 45373

RCRIS-SQG **FINDS** 

1000990732 OHR000000380

UST

RCRIS:

Owner:

MAYOR AND COUNCIL

(513) 339-1221

Contact:

MARK J LIVENGOOD

(937) 339-5554

Record Date:

10/31/1997

Classification:

Conditionally Exempt Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS)

Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

UST:

Facility ID:

55005715

Tank ID:

T00001

Owner: Owner Address: CITY OF TROY 100 S MARKET ST

TROY, OH 45373

Capacity:

10000

Tank Status:

CIU

Install Date:

04/01/1985

Content: Tank Type: Gasoline Fiberglass Reinforced Plastic

### MAP FINDINGS

Tank ID:

Tank Status:

Tank ID:

Tank Status:

Tank ID:

Tank Status:

Database(s)

T00002

CIU

T00003

CIU

T00004

CIU

**EDR ID Number EPA ID Number** 

TROY MAINTENANCE FACILITY CITY OF (Continued)

1000990732

Facility ID:

Capacity:

Owner: Owner Address:

55005715 CITY OF TROY

Owner: Owner Address:

100 S MARKET ST

Fiberglass Reinforced Plastic

TROY, OH 45373 10000

04/01/1985 Diesel

Install Date: Content: Tank Type:

Facility ID:

55005715

CITY OF TROY

100 S MARKET ST TROY, OH 45373

Capacity: Install Date:

4000 04/01/1985 Gasoline Content:

Tank Type:

Fiberglass Reinforced Plastic

Facility ID: Owner: Owner Address: 55005715 CITY OF TROY

100 S MARKET ST TROY, OH 45373 550

Capacity: Install Date:

04/01/1985 Used Oil

Content: Tank Type:

Fiberglass Reinforced Plastic

6 SE 1/8-1/4 1244 Higher **VEDO TROY** 1300 1300 EXPERIMENT FARM RD TROY, OH 45373

RCRIS:

DAYTON POWER AND LIGHT CO

(513) 227-2564

Contact:

Owner:

PAUL BROWN (513) 338-2611

Record Date:

Classification:

Conditionally Exempt Small Quantity Generator, Hazardous Waste Transporter

Used Oil Recyc: No

Violation Status: No violations found

Other Pertinent Environmental Activity Identified at Site:

Facility Registry System (FRS) Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

Α7 SE FRIENDLY ICE CREAM CORP.

**1903 W MAIN ST** 1/4-1/2 TROY, OH 45373

2457

Site 1 of 2 in cluster A Higher

LUST UST

1000560292 N/A

1000561316

OHD987021151

RCRIS-SQG

FINDS

# MAP FINDINGS

Database(s)

**EDR ID Number EPA ID Number** 

# FRIENDLY ICE CREAM CORP. (Continued)

1000560292

LUST:

Owner:

FRIENDLY ICE CREAM CORP.

Facility Status:

Inactive

LTF Status:

1 SUS/CON from regulated UST

Release Number: 55000051-N00001 Owner Address: 1903 W MAIN ST

TROY, OH 45373

FR Status:

No Further Action letter issued 550051

Old Facility Id:

Former Lust Release Number: 552152500

UST:

Facility ID:

55000051

Tank ID:

T00001

Owner: Owner Address: FRIENDLY ICE CREAM CORP.

1903 W MAIN ST

TROY, OH 45373

Capacity:

20000 11

Tank Status:

CIU

Install Date:

Content: Tank Type: Diesel

Cathodically Protected Steel

**A8** SE 1/4-1/2

SPEEDWAY #5298 1894 W MAIN ST TROY, OH 45373

UST U000894366 LUST N/A

2524 Higher

Site 2 of 2 in cluster A

LUST:

Owner:

JOHN KERR

Facility Status:

Inactive

LTF Status:

1 SUS/CON from regulated UST

Release Number: 55000281-N00001

Owner Address: PO BOX 1500 ATTN: JOHN M HELMS

SPRINGFIELD, OH 45501

FR Status:

Release id Disproved

Old Facility Id:

550281

Former Lust Release Number: 555059800

Owner:

JOHN KERR

Facility Status:

Inactive

LTF Status:

1 SUS/CON from regulated UST

Release Number: 55000281-N00002

Owner Address: PO BOX 1500 ATTN:JOHN M HELMS

SPRINGFIELD, OH 45501

FR Status:

Release id Disproved

Old Facility Id:

550281

Former Lust Release Number: 555059801

# MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

# SPEEDWAY #5298 (Continued)

U000894366

UST:

Facility ID:

55000281

Tank ID:

T00001

Owner:

SPEEDWAY\SUPERAMERICA LLC PO BOX 1500 ATTN: JOHN M HELMS

Owner Address:

SPRINGFIELD, OH 45501 12000

Tank Status:

CIU

Capacity: Install Date:

04/01/1990 Gasoline

Content: Tank Type: Steel 55000281

Tank ID:

T00002

Facility ID: Owner:

SPEEDWAY\SUPERAMERICA LLC PO BOX 1500 ATTN: JOHN M HELMS

Owner Address:

SPRINGFIELD, OH 45501 12000

Tank Status:

CIU

Capacity: Install Date: Content:

04/01/1990 Gasoline

Tank Type:

Steel

Tank ID:

T00003

Facility ID: Owner:

Owner Address:

55000281 SPEEDWAY\SUPERAMERICA LLC PO BOX 1500 ATTN: JOHN M HELMS

SPRINGFIELD, OH 45501

12000

Tank Status:

CIU

Capacity:

04/01/1990 Install Date:

Content: Tank Type: Gasoline Steel

# ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
ALCONY TROY TROY TROY TROY TROY TROY TROY TRO	\$104269025 \$103686363 \$101871559 \$104778121 \$104257479 \$104257481		7997 RT 41 SR 55 / SR 718 DYE MILL RD LYTLE RD 2423 W MARKET ST SR 55 4007 W SR 718 2678 W SR 718 1-75 / ST.RT. 41 (A)	45373 45373 45373 45373 45373	LUST LUST SHWS, DERR SHWS, DERR LUST LUST LUST UST	555-0253 555-0390 55000086

# **EPA Waste Codes Addendum**

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS
	THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D039	TETRACHLOROETHYLENE

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement

of the ASTM standard.

### FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/22/01 Date Made Active at EDR: 12/11/01

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/05/01

Elapsed ASTM days: 36

Date of Last EDR Contact: 11/05/01

# **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

**EPA Region 1** 

Telephone 617-918-1143

**EPA Region 3** Telephone 215-814-5418

**EPA Region 4** 

Telephone 404-562-8033

EPA Region 6

Telephone: 214-655-6659

**EPA Region 8** 

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA Telephone: N/A

> Date of Government Version: 10/22/01 Date Made Active at EDR: 12/11/01

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/05/01

Elapsed ASTM days: 36

Date of Last EDR Contact: 11/05/01

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/12/01 Date Made Active at EDR: 10/16/01 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 09/24/01

Elapsed ASTM days: 22

Date of Last EDR Contact: 12/26/01

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 07/12/01 Date Made Active at EDR: 10/16/01 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 09/24/01 Elapsed ASTM days: 22 Date of Last EDR Contact: 12/16/01

**CORRACTS:** Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/14/01 Date Made Active at EDR: 01/14/02

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/14/01

Elapsed ASTM days: 61

Date of Last EDR Contact: 11/14/01

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery

Act (RCRA).

Date of Government Version: 06/21/00 Date Made Active at EDR: 07/31/00 Database Release Frequency: Varies Date of Data Arrival at EDR: 07/10/00

Elapsed ASTM days: 21

Date of Last EDR Contact: 11/07/01

ERNS: Emergency Response Notification System

Source: EPA/NTIS

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Substances.

Date of Government Version: 08/08/00 Date Made Active at EDR: 09/06/00 Database Release Frequency: Varies Date of Data Arrival at EDR: 08/11/00

Elapsed ASTM days: 26

Date of Last EDR Contact: 10/25/01

# FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG)

and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99

Database Release Frequency: Biennially

Date of Last EDR Contact: 12/17/01

Date of Next Scheduled EDR Contact: 03/18/02

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A Database Release Frequency: Varies

Date of Last EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: NTIS

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/30/00 Database Release Frequency: Annually Date of Last EDR Contact: 01/07/02
Date of Next Scheduled EDR Contact: 04/08/02

**DELISTED NPL:** National Priority List Deletions

Source: EPA Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the

NPL where no further response is appropriate.

Date of Government Version: 11/13/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/05/01

Date of Next Scheduled EDR Contact: 02/04/02

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/29/01 Database Release Frequency: Quarterly Date of Last EDR Contact: 01/07/02
Date of Next Scheduled EDR Contact: 04/08/02

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4526

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 05/31/01 Database Release Frequency: Annually Date of Last EDR Contact: 10/22/01
Date of Next Scheduled EDR Contact: 01/21/02

MLTS: Material Licensing Tracking System Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/01 Database Release Frequency: Quarterly Date of Last EDR Contact: 01/07/02

Date of Next Scheduled EDR Contact: 04/08/02

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 08/24/01 Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/02
Date of Next Scheduled EDR Contact: 04/01/02

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/19/01

Date of Next Scheduled EDR Contact: 02/18/02

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-260-3936

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers

of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/30/01

Database Release Frequency: Annually

Date of Last EDR Contact: 11/13/01

Date of Next Scheduled EDR Contact: 02/12/02

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/11/01

Date of Next Scheduled EDR Contact: 03/11/02

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and

land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/99

Database Release Frequency: Annually

Date of Last EDR Contact: 12/26/01

Date of Next Scheduled EDR Contact: 03/25/02

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

site.

Date of Government Version: 12/31/98

Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 10/24/01

Date of Next Scheduled EDR Contact: 01/21/02

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 10/25/01 Database Release Frequency: Quarterly Date of Last EDR Contact: 12/26/01

Date of Next Scheduled EDR Contact: 03/25/02

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 10/25/01

Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/26/01

Date of Next Scheduled EDR Contact: 03/25/02

# STATE OF OHIO ASTM STANDARD RECORDS

SHWS: Master Sites List

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2068

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 03/01/99 Date Made Active at EDR: 04/21/99

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 03/29/99

Elapsed ASTM days: 23

Date of Last EDR Contact: 12/11/01

SWF/LF: Licensed Solid Waste Facilities

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2621

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/01/01 Date Made Active at EDR: 11/28/01

Database Release Frequency: Annually

Date of Data Arrival at EDR: 11/15/01

Elapsed ASTM days: 13

Date of Last EDR Contact: 11/14/01

LUST: Leaking Underground Storage Tank File

Source: Department of Commerce Telephone: 614-752-7924

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 12/16/01 Date Made Active at EDR: 12/28/01 Database Release Frequency: Quarterly Date of Data Arrival at EDR: 12/17/01

Elapsed ASTM days: 11

Date of Last EDR Contact: 12/17/01

**UST:** Underground Storage Tank Tank File Source: Department of Commerce

Telephone: 614-752-7938

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 12/16/01 Date Made Active at EDR: 12/28/01 Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/17/01

Elapsed ASTM days: 11

Date of Last EDR Contact: 12/17/01

# STATE OF OHIO ASTM SUPPLEMENTAL RECORDS

SPILLS: Emergency Response Database

Source: Ohio EPA Telephone: 614-644-2084

All reported incidents, spills or releases to the environment.

Date of Government Version: 12/31/98 Database Release Frequency: Varies Date of Last EDR Contact: 12/11/01

Date of Next Scheduled EDR Contact: 03/11/02

DERR: Division of Emergency & Remedial Response's Database

Source: Ohio EPA, Div. of Emergency Response

Telephone: 614-644-3538

Sites that may or may not have contamination.

Date of Government Version: 12/01/01 Database Release Frequency: Semi-Annually Date of Last EDR Contact: 12/18/01
Date of Next Scheduled EDR Contact: 03/18/02

# **EDR PROPRIETARY HISTORICAL DATABASES**

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

# Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

# OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

# **GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM**

### TARGET PROPERTY ADDRESS

SPINNAKER COATING 30 MARY BILL DRIVE TROY, OH 45373

# TARGET PROPERTY COORDINATES

Latitude (North):

40.059700 - 40° 3′ 34.9″

Longitude (West):

84.244301 - 84° 14' 39.5"

Universal Tranverse Mercator: UTM X (Meters):

Zone 16 735042.7

UTM Y (Meters):

4437812.5

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

# **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

# USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property:

2440084-A2 TROY, OH

Source: USGS 7.5 min quad index

### GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property:

General East

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

# **FEMA FLOOD ZONE**

**FEMA Flood** 

**Target Property County** 

**Electronic Data** 

MIAMI, OH

Not Available

Flood Plain Panel at Target Property:

Not Reported

Additional Panels in search area:

Not Reported

NATIONAL WETLAND INVENTORY

**NWI Electronic** 

NWI Quad at Target Property

Data Coverage

TROY

YES - refer to the Overview Map and Detail Map

# HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

# **AQUIFLOW®**

Search Radius: 2,000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

> MAP ID Not Reported

**LOCATION** FROM TP

**GENERAL DIRECTION GROUNDWATER FLOW** 

# **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

# **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### **ROCK STRATIGRAPHIC UNIT**

### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratifed Sequence

Era:

Paleozoic

System:

Silurian

Series: Code:

Middle Silurian (Niagoaran) S2 (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:

**CROSBY** 

Soil Surface Texture:

silt loam

Hydrologic Group:

Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:

Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is

1 to 3 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min:

> 60 inches

Depth to Bedrock Max:

> 60 inches

Soil Layer Information							
Boundary			Classification				
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10
2	9 inches	13 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.20 Min: 0.06	Max: 7.30 Min: 5.10
3	13 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.20 Min: 0.06	Max: 7.30 Min: 5.10
4	22 inches	60 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.20 Min: 0.06	Max: 8.40 Min: 7.40

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silty clay loam

loam

Surficial Soil Types: silty clay loam

loam

Shallow Soil Types: silt loam

clay clay loam

Deeper Soil Types:

stratified

gravelly - coarse sand

# ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

# WELL SEARCH DISTANCE INFORMATION

DATABASE

SEARCH DISTANCE (miles)

Federal USGS

1.000

Federal FRDS PWS

Nearest PWS within 1 mile

State Database

1.000

### FEDERAL USGS WELL INFORMATION

MAP ID

LOCATION

WELL ID

400338084154200

FROM TP 1/2 - 1 Mile West

LOCATION

MAP ID

WELL ID

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

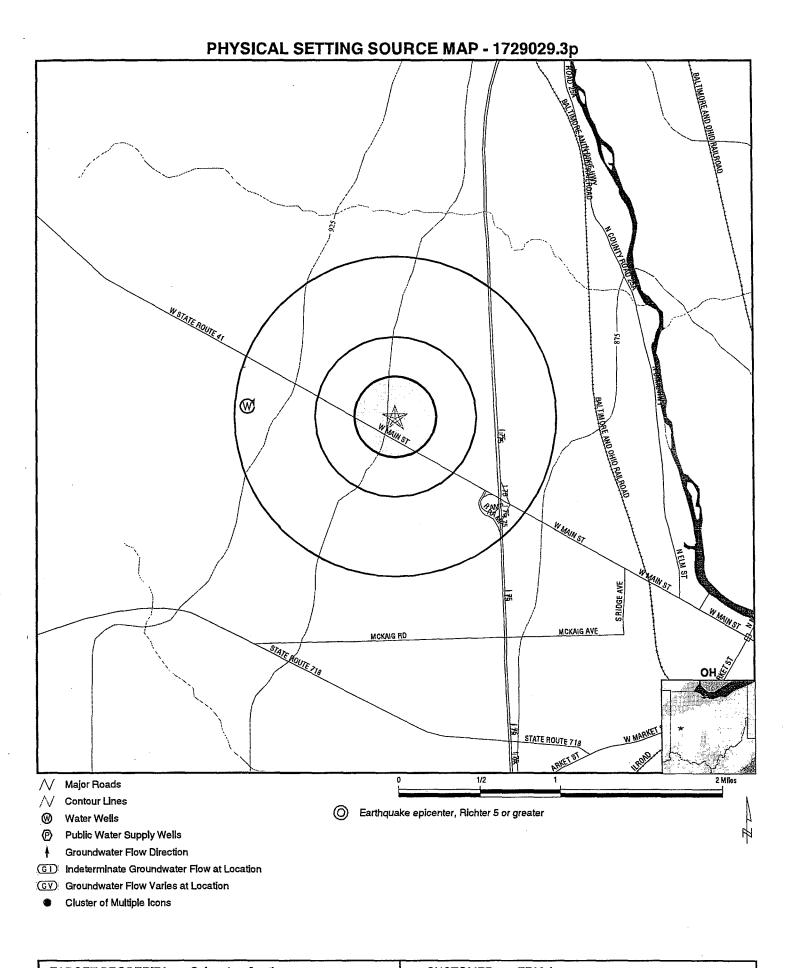
# STATE DATABASE WELL INFORMATION

MAP ID

WELL ID

LOCATION FROM TP

No Wells Found



Spinnaker Coating 30 Mary Bill Drive Troy OH 45373 TARGET PROPERTY: CUSTOMER: CONTACT: ADDRESS: CITY/STATE/ZIP: INQUIRY#: 40.0597 / 84.2443 LAT/LONG: DATE:

ERM, Inc. Leigh Sievert 1729029.3p January 30, 2002 12:28 pm

# **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance Elevation

Database

EDR ID Number

1 West 1/2 - 1 Mile Higher

**FED USGS** 

400338084154200

**BASIC WELL DATA** 

Site Type:

Single well, other than collector or Ranney type

1979

County:

Miami

Year Constructed: Altitude:

937.00 ft.

State:

Ohio

Well Depth: Depth to Water Table: 68.00 ft. 2.00 ft.

Topographic Setting: Flat surface Prim. Use of Site:

Withdrawal of water

Date Measured:

06261979

Prim. Use of Water: Domestic

# GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS RADON

# AREA RADON INFORMATION

Federal EPA Radon Zone for MIAMI County: 1

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Zip Code: 45373

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	1.300 pCi/L Not Reported	100% Not Reported	0% Not Reported	0% Not Reported
Basement	8.280 pCi/L	20%	80%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

# HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

### HYDROGEOLOGIC INFORMATION

# AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

# **GEOLOGIC INFORMATION**

# Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

# ADDITIONAL ENVIRONMENTAL RECORD SOURCES

# **FEDERAL WATER WELLS**

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

**USGS Water Wells:** In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STATE RECORDS

**Ohio Public Water Systems** 

Source: Ohio EPA, Division of Drinking and Groundwater

Telephone: 614-644-2752

# **RADON**

**Area Radon Information:** The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

**EPA Radon Zones:** Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

# OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

# Appendix I Professional Profiles

# Leigh Anne Sievert





Over nine years of EH&S related experience including over three years with Ohio EPA, Division of Air Pollution Control providing technical assistance. Determined regulatory requirements and completed all aspects of permit application.

As a consultant, provided staff augmentation to support ISO 14001 certification process, and completed environmental regulatory reporting including hazardous waste, SARA 302, 303 and 311, Title V Fee Emission Reports, Title V Emission Inventory Statements, and SARA 313 (TRI). Experience also includes conducting environmental compliance audits, developing EH&S intranet web sites for two large manufacturing facilities, formulating industrial hygiene exposure assessment plans and conducting appropriate sampling and monitoring, investigating indoor air quality complaints and developing Health and Safety Management System, and performing Environmental Site Assessments (ESAs).

# **Fields of Competence**

- Environmental regulatory compliance & reporting
- ISO 14001
- Environmental Site Assessments (ESAs)
- Air permitting
- Clean air act amendments
- MACT compliance
- Air emissions inventory development
- Environmental auditing
- Pollution prevention
- EH&S Intranet development
- Health and safety management systems
- Health and safety program development
- Database development
- Industrial hygiene sampling/monitoring
- Environmental program development

# Education

• B.S., Environmental Health, Bowling Green State University, 1995

# **Certification and Training**

OSHA 40 hour HAZWOPER Training, 1998



# **Key Projects**

Provided ISO 14001 support for Tier 2 automotive suppliers preparing for certification.

Provided ISO 14001 staff support for newly certified facility including; writing and revising EMS documents, designing on-line EMS awareness reviews and tracking /publishing metrics.

Performed Environmental Site Assessments/ Compliance audits for international companies.

Performed air quality compliance audits for over 100 facilities.

Prepared emission inventories and emissions estimates while providing air permitting guidance and engineering support to a wide variety of industries including: dry cleaners, foundries, metal parts manufacturing, plastic recycling, stone processing plants, printing operations, sawmills, fuel burning operations, specialty rubber manufacturing, electronics, storage tanks, grain elevators and chrome plating.

Conducted audits in response to U.S. EPA's SARA 313 Nitrate Compliance Initiative.

Prepared Integrated Contingency Plans for export /warehouse facility and automotive parts manufacturers.

Developed Health and Safety Management System for a large telecommunications company.

Developed EH&S web page for two large manufacturing facilities.

# Dennis P. Shelly, P.E., DEE, CPEA





Mr. Shelly has more than 25 years of professional experience and provides strategic due diligence, environmental management, and compliance services to corporations, financial groups and their counsel. Mr. Shelly has extensive experience conducting and managing environmental due diligence services on transactions of all sizes on a local to global scale. He leads ERM's M&A Services Practice in New York City, New York, northern New Jersey, and Connecticut. His road experience includes conducting and managing environmental site assessments, compliance audits, and other environmental and engineering studies for the financial, real estate, commercial, legal, and industrial sectors. In addition, he has managed a variety of municipal and industrial water and wastewater treatment, permitting, distribution and collection projects. His responsibilities typically include designing and conducting environmental due diligence activities, coordinating multiple teams of auditors, ensuring quality and consistency of reporting, client and counsel liason, and presentation of findings. He has an exceptional record of simultaneously managing multiple complex and fast-paced projects.

Prior to joining ERM, Mr. Shelly was a co-founder of Alden Environmental Management, Inc., a firm that provided environmental auditing and due diligence services to a wide variety of corporate, legal, and financial institutions. In prior employment, he has been responsible for all aspects of non-remediation environmental projects for industry including wastewater treatment, environmental permits, and emergency response planning. He also managed a Management Consulting Department where he was responsible for corporate environmental program assistance including training and environmental reporting. His experience has included the power, steel, chemical, petroleum, pulp and paper, pharmaceutical, electronics and precious metals industries, as well as municipal water and wastewater.

# Registration

- Registered Professional Engineer in PA, NJ, and DE
- Diplomate, Board Certified by American Academy of Environmental Engineers
- Professional Environmental Auditor, Board of Environmental Auditor Certifications

# **Fields of Competence**

- Environmental due diligence assessments
- Environmental Management Systems
- · Environmental compliance audits
- · Corporate auditing program development
- Environmental program assistance, including training and environmental reporting

# Credentials

- B.S., Civil Engineering, Pennsylvania State University, 1973
- M.E., Civil Engineering, Villanova University, 1979
- EPA Accredited Asbestos Building Inspector
- Part-time instructor, Villanova University, Graduate Program, Hazardous Waste Management (1990, 1992) and Industrial Wastewater Treatment (1990)
- Chair of Contractor/Vendor Assessment Work Group, Environmental Auditing Roundtable, 1996-98

# **Professional Affiliations**

 Appointed Member of Water Quality Technical Advisory Committee for the Pennsylvania Department of Environmental Protection, 1996-2001



# **Key Projects**

Managed the environmental due diligence assessment of a metal chemicals manufacturer as part of a proposed acquisition. The target company operated in 14 countries and over 100 locations. ERM prepared an estimate of environmental liabilities using a limited number of site visits, a data room review, and interviews with company personnel. The value of the transaction exceeded \$1 billion.

Managed the environmental due diligence assessment of 21 facilities of a major film and video processing company located in 8 countries.

Managed the environmental due diligence of 15 locations of an agricultural chemical company located in 6 countries.

Managed the due diligence assessments of hundreds of industrial facilities, including: heavy equipment manufacturing; petroleum distribution; chemical and pharmaceutical; battery manufacturing; agricultural chemicals; railcar repair; electronics; meat processing; waste oil processors; auto parts; telecommunications; utilities; environmental and radiological laboratories; primary metals; explosives; children's apparel; and wire manufacturing.

Completed detailed audits of more than 80 operating waste management facilities across the U.S. during a 12-year period. As manager of an ongoing contract for a major consortium of companies, has been responsible for quality and scheduling of scores of waste management facility audits.

Completed compliance audits for the steel, mining, chemical, pharmaceutical, packaging, petroleum, paper, automobile, and metal finishing and production industries.

Has assisted corporate clients with reporting obligations under Community Right to Know since 1986. Provided technical guidance in the development of SARA 313 reporting software.

Completed Phase I environmental assessments of scores of commercial and retail properties throughout the country.

Designed a wastewater treatment facility for a precious metals product manufacturing facility. The process included ammonia stripping, two-stage neutralization, and metals removal to part-per-billion concentrations.

Provided wastewater treatment system analysis and operations assistance for an auto parts manufacturing company.

Completed pilot plant studies for wastewater discharges including landfill leachate, specialty chemicals, metal products manufacturing and municipal sanitary wastes.

Throughout his career, has completed water distribution system analyses, designed the expansion and upgrade of water and wastewater treatment facilities, oversaw the design and construction of assorted wastewater collection and treatment facilities, and provided operation analysis and consultation for wastewater treatment facilities.

Designed, specified, and supervised the manufacture and construction of major portions of a flue gas desulfurization facility for a major southwestern utility.

# Daniel W. Longbrake





Fifteen years of diverse experience in the environmental consulting field. Experienced in the areas of permitting, negotiation, and implementation of projects associated with the RCRA and CERCLA programs. Extensive experience regarding the design, management, and execution of subsurface soil and groundwater investigations, contamination assessments, risk-based decision making, remedial action planning, and soil and groundwater remediation strategies for industrial clients. Has also assisted clients on numerous projects involving liability management/reduction, property acquisition/divestiture, voluntary cleanup programs, and aboveground and underground storage tank management.

# Registration

 Certified Professional, Ohio EPA Voluntary Action Program

# **Fields of Competence**

- Merger, Divestiture and Acquisition
- RCRA Corrective Action (RFA, RFI/CMS/CMI)
- RCRA permitting and closures
- CERCLA, RI/FS and RD/RA
- State voluntary clean-up programs (IL, IN, OH, PA)
- · Multi-media assessment and remediation activities
- Storage tank management, assessment & remediation
- Environmental liability management & reduction strategies

# Education

• B.S., Geology, Allegheny College, 1988

# **Professional Affiliations**

- Air & Waste Management Association
- Association of Groundwater Scientists and Engineers
- Association of Iron and Steel Engineers
- Member of the Ohio Chamber of Commerce
- Member of the Ohio Cast Metals Association
- American Foundrymens Society

# **Recent Publications**

"RCRA Corrective Action: Reforms, Initiatives, and Strategies." Presented at the 10<sup>th</sup> Annual Business and Industry's Environmental Symposium, Cincinnati, Ohio, March 22, 2001.

"The Due Diligence Process: Business Environmental Risk." Presented to Squire, Sanders & Dempsey, LLP, January 2001, and to Roetzel & Andress, November 2000.

# **Key Projects**

Senior Manager and technical lead for a USEPA lead RCRA Corrective Action at a 700-acre steel mill site located in Northeastern Ohio. The site had over 100 solid waste management units (SWMUs) and areas of concern (AOCs). Contaminants were a complex array of constituents that include, but were not limited to, metals, volatile organic compounds (VOCs), and polynuclear aromatic hydrocarbons (PAHs). Participated in the negotiation of the Consent Order and Statement of Work (SOW), managed investigation and remediation activities, and provided technical oversight of all deliverables (workplans, reports, etc.).

Managed and participated in extensive multi-media environmental investigations related to RCRA RFI and CERCLA RI/FS at numerous military installations in the Southeast and Midwest. Contaminants included VOCs, SVOCs, pesticides/herbicides, and other more exotic contaminants. Work included workplan development, soil gas surveys, investigation activities (soil, groundwater, sediment, surface water) reporting, and remedial planning.

Managed preparation of a Focused Feasibility Study (FFS) and aided in negotiating, designing, and implementing recovery and interim remedial measures including containment remedies for groundwater impacted with pyridine-and coal tar-related constituents at a Superfund site in central Indiana. Work included extensive hydrogeologic investigation, fate and transport modeling, and risk assessment.

Project Manager for UST management program for client having over 100 retail gasoline service stations located in the southeast United States. Work included conducting preliminary contamination assessments, contamination assessments, remedial action plans, interim remedial actions, tank closures, and soil and groundwater remediation. Where applicable, reimbursement packages were prepared. As the manager of the program, responsibilities included agency negotiation, oversight of technical performance, and deliverables (reports, plans, etc.).

Served as Senior Project Manager for a Phase I/II environmental site assessment for a forge located in Central Indiana. Work included an asbestos survey, a PCB inventory and sampling, surface and subsurface soil sampling and analysis, groundwater sampling and analysis, interpretation of the results, and the development of remedial cost estimates. Specific

concerns included former bulk fuel storage, a manufactured gas plant, and drum storage areas. Contaminants of concern included VOCs, PAHs, and metals. Work was conducted on a fast track to allow for quick decision-making as to the viability of purchasing the property.

Senior Manager for merger & acquisition project involving 45 retail gasoline stations. Work included Phase I and II Environmental Site Assessments. Phase II work included collection of soil and groundwater samples, and on-site analysis of collected samples utilizing a portable laboratory equipped with a gas chromatograph.

Managed the assessment of environmental liabilities for SEC filings for a major U.S. steel producer. Work included "white paper" studies and on-site evaluations to establish and/or update booked liabilities at nine locations.

Managed over 150 individual and/or multi-facility Phase I Environmental Site Assessments and limited compliance reviews related to property transfer at industrial and commercial facilities located throughout the U.S. Most assessments were conducted in general conformance with the ASTM standards in effect at the time (1994, 1997, 2000). Follow-on work often included Phase II Environmental Site Assessments. In many cases, environmental liabilities were quantified and summarized for use in negotiating the property transfer.

Managed voluntary cleanups in several states including Ohio, Indiana, Illinois, Pennsylvania and Florida. Where applicable, work was conducted in accordance with the state-specific voluntary cleanup program guidance and rules.

# **APPENDIX D: Soil Survey Data**



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Miami County, Ohio

**Spinnaker Coating Plant 1** 



# **Preface**

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://soils.usda.gov/sqi/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app? agency=nrcs) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state\_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# **Contents**

Preface	2
How Soil Surveys Are Made	
Soil Map	
Soil Map	8
Legend	9
Map Unit Legend	10
Map Unit Descriptions	10
Miami County, Ohio	12
EIA—Eldean loam, 0 to 2 percent slopes	12
References	14

# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

### Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



### MAP LEGEND

### Area of Interest (AOI)

Area of Interest (AOI)

### Soils

Soil Map Units

### **Special Point Features**

( ) Blowout

■ Borrow Pit

Clay Spot

Closed Depression

X Gravel Pit

.. Gravelly Spot

\(\text{\text{\text{Landfill}}}\)

∧ Lava Flow

علد Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

+ Saline Spot

"." Sandy Spot

Severely Eroded Spot

Sinkhole

3 Slide or Slip

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

### Special Line Features

20

Gully

Short Steep Slope

Other

### **Political Features**

0

Cities

### **Water Features**

Streams and Canals

### Transportation



Rails

Interstate Highways



US Routes



Major Roads



Local Roads

### MAP INFORMATION

Map Scale: 1:2,180 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Miami County, Ohio Survey Area Data: Version 9, Jan 26, 2010

Date(s) aerial images were photographed: 6/30/2004

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

Miami County, Ohio (OH109)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
EIA	Eldean loam, 0 to 2 percent slopes	5.6	100.0%	
Totals for Area of Interest		5.6	100.0%	

# **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

### Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Miami County, Ohio

## EIA—Eldean loam, 0 to 2 percent slopes

### **Map Unit Setting**

Elevation: 670 to 1,160 feet

Mean annual precipitation: 29 to 45 inches Mean annual air temperature: 50 to 55 degrees F

Frost-free period: 151 to 192 days

### **Map Unit Composition**

Eldean and similar soils: 95 percent Minor components: 5 percent

### **Description of Eldean**

### Setting

Landform: Terraces

Parent material: Loamy outwash

### **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: 24 to 40 inches to strongly contrasting textural

stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 65 percent Available water capacity: Low (about 3.6 inches)

### Interpretive groups

Land capability (nonirrigated): 2s

### Typical profile

0 to 12 inches: Loam 12 to 23 inches: Clay loam

23 to 30 inches: Gravelly clay loam

30 to 60 inches: Error

### **Minor Components**

### Slopes of 2 to 6 percent

Percent of map unit: 5 percent

### **Ockley**

Percent of map unit: Landform: Terraces

### Silt loam surface layer

Percent of map unit:

# Custom Soil Resource Report

# References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

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United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://soils.usda.gov/

# Custom Soil Resource Report

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

# **APPENDIX E: Correspondence Documentation**



Fire Chief Chris Boehringer Troy Fire Department 19 East Race Street Troy, Ohio 45373 VIA email: christopher.boehringer@troyohio.gov

Subject Property: Spinnaker Coating, LLC Plant #1

518 East Water Street Troy, Miami County, Ohio

### Chief Boehringer:

MAKSolve, L.L.C. is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are requesting a records review regarding any calls, complaints, hazardous materials incidents, spills, releases, Aboveground Storage Tanks (ASTs), Underground Storage Tanks (USTs), fire code violations or other environmentally related issues that may be on file for this location.

You can send your response to my attention at <u>richard@maksolve.com</u>, FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 937-558-6993.

Thank you.

Welcome to the new way t	o navigate Google. Roll over the logo to have a look.	
•	Spinnaker	
Gmail	Move to Inbox More	
COMPOSE	Timeshare Cancellation - www.FinnLawGroup.com/TakeAction/ - Cancel your Timeshare with a Real Attorney Today	! 855-346-6529
Inbox (8,134) Important	Spinnaker Coating, LLC Plant #1 Assessment	
Sent Mail  Drafts (1)  Spam (54)  Collectors Cataloger  Personal  Travel  More  Chat  Search people  Richard Ordeman  Set status here  Call phone  Claire Go  nathan H  Lee Orde  Patrick T  Beehler,	Matthew Simmons matthew.simmons@troyohio.gov via maksolve.com to richard Richard,  After reviewing the files on Spinnaker Coating, LLC Plant #1, I did not find any outstanding code other environmentally related issues. They have been current with all inspections and reporting are any other questions, please contact our office.  Thanks,  Matthew D. Simmons Assistant Fire Chief Troy Fire Department 40 South Stanfield Road Troy, Ohio 45373  Phone: (937) 335-2227 Fax: (937) 335-2227	
Catherin Dave Re	to Michael	
Jan Linda Miller	Michael Kerr	Jan 5 (3 days ago) 🏠

Rick Stra...

Rick: I have now subscribed to drop box (what a pain), and I guess it now has access to my computer (not happy about that), and I guess it has now saved a slew of files to my hard drive and I have looked at them and it appears they are all bits and pieces of the PIESA Report. However, I do not see the Report, the text, is that forthcom Take a tour | Send feedback



OEPA Southwest District Office 401 East Fifth Street Dayton, Ohio 45402 Via email: Penny.Horstman@epa.state.oh.us

Subject Property: Spinnaker Coating, LLC Plant #1

518 East Water Street Troy, Miami County, Ohio

MAKSolve, L.L.C. is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we wish to determine whether government agencies possess records on the subject property or adjacent properties that may include potential environmental concerns. These concerns include but are not limited to:

Aboveground Storage Tanks (ASTs) and/or Underground Storage Tanks (USTs); Demolition or removal permits Hazardous releases Ongoing remediation and/or cleanup

MAKSolve would like to check with the following divisions to determine if they maintain records for the subject property:

Division of Air Pollution Control; Division of Drinking and Ground Waters; Division of Environmental Response and Remediation; Division of Materials And Waste Management; and Division of Surface Water.

You can send your response to my attention at <a href="richard@maksolve.com">richard@maksolve.com</a>, FAX me at 937-660-6845, or mail it to my attention at the address below. Please notify me prior to making any copies of files that may exceed a fee of \$25.00.

If you have any questions regarding this submittal, please call me at 937-558-6993.

Thank you.

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Click here to Reply or Forward

88% full Using 6763 MB of your 7666 MB

Dave Re... Jan

Linda Miller Martha &... Rick Stra...

# Brown-Bridge Plant #1 518 E. Water Street Troy 45373 Miami County 555-1490

- File Index
- Correspondence 2009
- Correspondence/2008 to Present
- Correspondence July thru December 2007
- Correspondence January thru June 2007
- Termination Order, 3-16-09
- Cost Recovery Summary April 2009
- Cost Recovery Documentation, 4-22-09
- Analytical Report/September 2008
- June 2008 Quarterly Monitoring Results
- Kimberly-Clark Response to Comments/5-30-08
- March 2008 Quarterly Monitoring Results
- December 2007 Quarterly Monitoring Results
- September 2007 Kimberly- Clark Groundwater Data
- July 2007 Geoprobe Investigation Results
- Spinnaker Ground Water Sampling (**On CD**)
  June 2007
- Kimberly Clark Field Measurements and Analytical Summary Table Includes CD

- June 2007 Analytical Results
- March 2007 Kimberly Clark Analytical Results
- March 2007 OEPA Quarterly Sampling Results
- **CONFIDENTIAL** Enforcement Referral/7-31-95 (2 copies)
- CONFIDENTIAL Attorney/Client Privileged
- CONFIDENTIAL Law Enforcement Investigatory Record

# DOCUMENTS LOCATED ON SHELVES

- Supplemental Soil and Groundwater Delineation Report Shaw Environmental Inc. October 2006
- Work Plan for Source Delineation and Characterization Shaw Environmental June 2004

### **DEAD FILE BOX #1**

- Lab Analytical Reports/Oct 1993 site inv. (Includes data not sent on Aug. 27)
- Potentiometric Maps/Various time periods
- Constituent concentration graphs (various time periods)
- Weekly System Operation Checklists 1
- Weekly System Operation Checklists 2
- Weekly System Operation Checklists 3
- Weekly System Operation Checklists 4
- Weekly System Operation Checklists 5
- 1993 Investigation Lab Reports (Soil & GW)
- 1994 Inv. Lab Reports (Soil & GW) 1
- 1994 Inv. Lab Reports (Soil & GW) 2
- 1994 Inv. Lab Reports (Soil & GW) 3
- 1994 Inv. Lab Reports (Soil & GW) 4
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 1
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 2
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 3
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 4
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 5
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 6
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 7

# **DEAD FILE BOX #1 - Continued**

- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 8
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 9
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 10
- 11/95-6/99 Lab Reports Monitoring Wells and West End GW Treatment System 11
- Current GW Analytical Data Summary Tables/8-99

# **DEAD FILE BOX #2**

- 5//21/02 Sampling Results
- Feb. 12, 2002 Sampling Results
- October 31, 2001 Sampling Results
- Sampling Results/August 1, 2001
- Sampling Results/April 23-24, 2001
- March 13, 2001 Sampling Results

# **DEAD FILE BOX #3**

- Correspondence 2004-2006
- Correspondence 2003
- Correspondence 2002
- Correspondence 2001
- Correspondence 2000
- Correspondence 1999
- Correspondence 1998
- Correspondence 1996-1997
- Correspondence thru 1995
- December 2006 Sampling Results
- September 2006 Sampling Results
- 03/28/2006 Sampling Results
- 08/31/2005 Sampling Results
- 9/13/04 Sampling Results
- 6/9/04 Sampling Results
- 3/17/04 Sampling Results
- 12/04/03 Sampling Results
- 9/15/03 Sampling Results
- 06/11/03 Sampling Results
- 03/11/03 Sampling Results
- 12/05/02 Sampling Results

# **DEAD FILE BOX #3 - Continued**

- 9/04/02 Sampling Results
- Generator/Facility Annual Reports

### **DEAD FILE BOX #4**

- Analyticals (located in expanding file)
- Director=s Final Findings and Orders/3-13-01
- 8/94 Site Report & Correspondence thru 12/7/94
- Geological/Geotechnical 1/3/95 -
- Ownership Information as of 1/97
- Property Drawings
- Soil Sampling Results
   Hobart UST and Rail Spur Property
   Applied Engineering & Science, Inc.
   June 1994
- Current Site Conditions and Remediation Options Applied Engineering & Science August 1994
- Closure Spinnaker Facility - West End April 2002
- Response to Ohio EPA
   Applied Engineering & Science, Inc.
   March 1998
- Site Remediation Report
   Volume I/Text and Appendices A and B
   Applied Enineering & Science, Inc.
   November 1995
- Site Remediation Report Volume II/Appendices C-N Applied Engineering & Science, Inc. November 1995

- Groundwater Remediation Systems Applied Engineering & Science, Inc. November 1995
- Site Closure Report Former Brown-Bridge Facility Prepared by Steve McFadden February 2001



Mr. Tim Davis
City of Troy Engineering Department
Planning & Zoning Department
102 South Market Street
Troy, Ohio 45373

Mr. Davis:

MAKSolve, L.L.C. is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are looking for information regarding current zoning and any code violations on file for the subject property.

VIA email: tim.davis@troyohio.gov

Spinnaker Coating, LLC Plant #1 518 East Water Street Troy, Miami County, Ohio

You can send your response to my attention at <u>richard@maksolve.com</u>, FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 937-558-6993.

Thank you.



Miami County Health District 510 West Water Street, Suite 130 Troy, Ohio 45373-2985 Via Email: mchd@miamicountyhealth.net

Subject Property: Spinnaker Coating, LLC Plant #1

518 East Water Street Troy, Miami County, Ohio

MAKSolve, L.L.C. is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are requesting a records review regarding any calls, complaints, code violations or other environmentally related issues that may be on file for this location.

You can send your response to my attention at <u>richard@maksolve.com</u>, FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 937-558-6993.

Thank you.



Mr. Tim Davis
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102 South Market Street
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VIA email: tim.davis@troyohio.gov

Spinnaker Coating, LLC Plant #1 518 East Water Street Troy, Miami County, Ohio

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If you have any questions regarding this submittal, please call me at 937-558-6993.

Thank you.



November 21, 2019

Mr. Timothy Hoffman Partner Dinsmore & Shohl, LLP One South Main Street, Suite 1300 Dayton, Ohio 45402

RE: INDOOR AIR ASSESSMENT

SPINNAKER COATINGS 518 EAST WATER STREET

TROY, MIAMI COUNTY, OHIO 45373
MAKSOLVE PROJECT NUMBER 145-19

Dear Mr. Hoffman:

MAKSolve has completed an Indoor Air Assessment (Assessment) at the Spinnaker Coatings building (subject building), located at 518 East Water Street, in Troy, Ohio (subject property). This Assessment was conducted in accordance with the scope of services outlined in the approved proposal, dated November 1, 2019. The Assessment was conducted to evaluate the indoor air conditions at the subject property, in regards to known tetrachloroethylene (PCE) and trichloroethylene (TCE) impacted soils and groundwater, located in the vicinity and adjoining the subject building. The impacted areas are documented adjacent to the northwest corner of the subject building according to the *East Troy Contaminated Aquifer Superfund Site, Interim Record of Decision for Source Area Cleanup*, (IROD) dated September 6, 2018, compiled by the United State Environmental Protection Agency.

### **SCOPE AND METHODS**

On November 8, 2019, MAKSolve deployed five 2.7-liter SilcoCan® canisters with 8-hour regulators, at breathing height within the interior of the subject building and one canister, outside as a control. The interior canisters were placed at various locations throughout the subject building to sample the ambient air over a typical 8-hour shift and were labeled as such: IA-1, IA-2, IA-3 and IA-4. The outdoor canister was placed upwind of the subject building to the west and was labeled as IA-5.

The subject building is partitioned into seven operational spaces, identified as B01 through B07, which are subdivided based on function and date of construction. The subject building is generally constructed on a concrete slab-on-grade, however, two partial basements are present beneath the B02 section, near the west-middle portions of the building and the B06 section, encompassing the eastern portions of the subject building. Canister IA-1 was placed in the B05 portion, in the crawl space beneath the raised loading dock along the western interior of the subject building. Canister IA-2 was placed in the northeast corner of the subject building, in the basement area of B06. Canister IA-3 was placed in a north-central area the basement, beneath of B02. Canister IA-4 was placed near the racking on the first floor of B01. Canister IA-5 was placed in the B04 pump room. See Attachment 1, Figure 1, denoting the location of the subject building and Figure 2, denoting the sample canister locations.

During deployment, all pertinent information was recorded including canister number, regulator number and ambient air conditions. Following canister documentation, the regulators were opened to begin the test and starting vacuum pressure was recorded. The sample canisters were retrieved the same day, approximately six to eight hours later. Following their collection, the samples were submitted under standard chain-of-custody protocol to Alpha Analytical for volatile organic compounds (VOCs) analysis, per EPA Method TO-15.

### **SUMMARY OF FINDINGS**

The Ohio Environmental Protection Agency (Ohio EPA), Voluntary Action Program (VAP) Generic Indoor Air Standards (GIAS) Due To Vapor Intrusion For A Single Chemical (commercial/industrial land use category), were used to evaluate the potential health risks posed by the chemicals of concern in the indoor air samples collected via SilcoCan® canisters. Twenty-one VOC constituents were detected above the laboratory reporting limits within the SilcoCan® canister samples collected. None of the constituents were detected at concentrations exceeding their respective GIAS, with the exception of TCE and 1,2,4-trimethlbenzene (TMB). TCE was reported at a concentration of 301 micrograms per cubic meter ( $\mu$ g/m³) from sample IA-1 above its GIAS of 8.8  $\mu$ g/m³. TMB was reported at a concentration of 140  $\mu$ g/m³, above its GIAS of 31  $\mu$ g/m³. The indoor and outdoor air results are presented in Table 1, Attachment 2. A copy of the laboratory analytical results are provided in Attachment 3.

As TMB was not documented as a chemical of concern in the surrounding soils in the IROD, its presence is attributed to an interior source such as gasoline, paints or lacquer thinners. Based on a cursory chemical inventory conducted at the Spinnaker facility by MAKSolve, TCE was not identified as a chemical used or stored on the premises. In combination with its known concentrations in the surrounding soils adjoining the northwest corner of the subject building, its presence in the crawl space is attributed to vapor intrusion.

The crawl space is an accessible area beneath the razed loading dock slab that is rarely entered by Spinnaker personnel. It is accessed through a small door along its southern wall, which opens into an approximately twenty by fifty foot, three to five feet in height space, used for storage. This area is not isolated in terms of ambient air flow from the rest of the plant and specifically the B05 portion of the subject building. As such, the impacted air has the potential to migrate into the general air space of the surrounding docking area. To evaluate this potential, additional testing would be warranted in the areas above and surrounding crawl space. To mitigate or eliminate potential exposure to the impacted air, it is recommended that the crawl space be designated as a limited access room in conjunction with the installation of a ventilation system to create a negative pressure environment. Once these measures have been completed, confirmatory sampling should be conducted.

MAKSolve has completed this work according to generally accepted standards and practices of environmental consultants performing such work, and the statements contained in the report are true and accurate to the best of our knowledge. This Assessment report has been prepared for the exclusive use of Dinsmore & Shohl, LLP.

Sincerely, MAKSolve

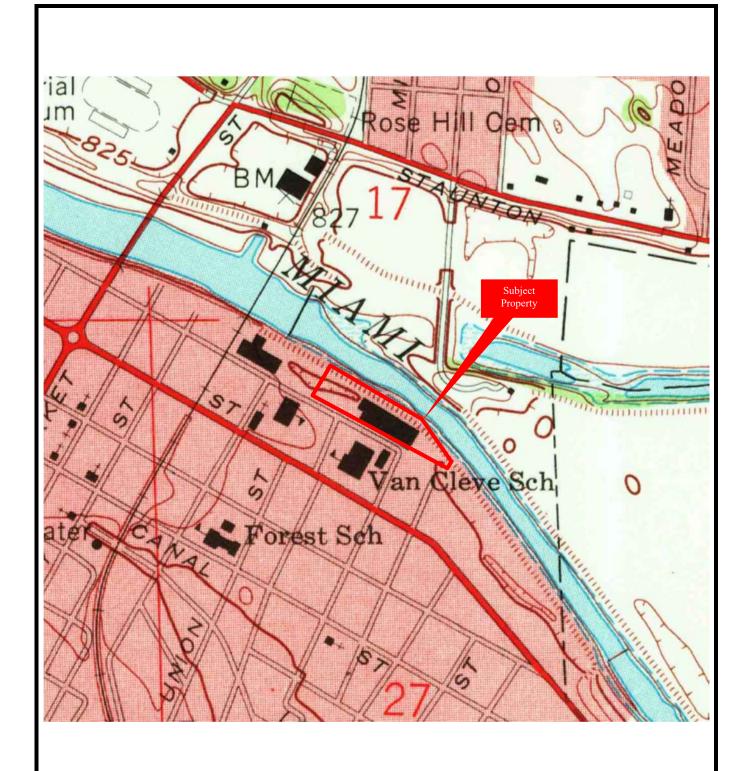
John Bowen

Senior Project Manager

In Bowen

# **ATTACHMENT 1**

**FIGURES** 



Source	Date	Revision	Project
USGS	1961	NA	145-19
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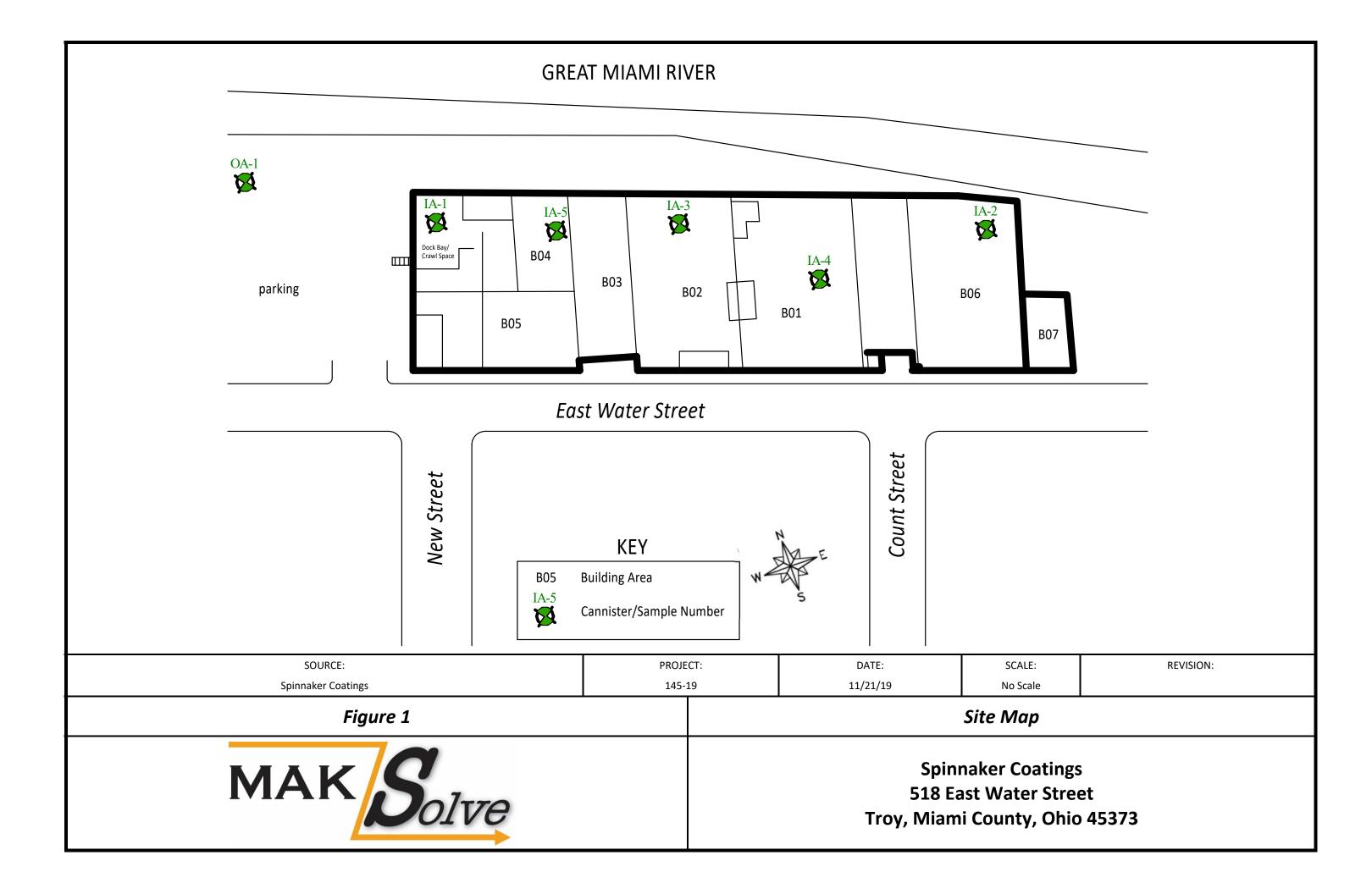
Figure 1

# Troy, Ohio 7.5 Minute Topographic Map



Spinnaker Coatings 518 East Water Street Troy, Miami County, Ohio 45373





## ATTACHMENT 2

**TABLES** 

Table 1 - Indoor Air Sample Results Compared to Ohio EPA Standards
Spinnaker Coatings
518 East Water Street
Troy, Ohio 45373

Location		IA-1	IA-2	IA-3	IA-4	IA-5	OA-1	Generic Indoor Air Standards Due
Sampling Date		11/8/2019	11/8/2019	11/8/2019	11/8/2019	11/8/2019	11/8/2019	to Vapor Intrusion -
Parameter	Units	Results	Results	Results	Results	Results	Results	commercial/industrial land-use*
Propylene	ug/m3	3.13	1.15	11	4.37	6.92	ND	NA
Dichlorodifluoromethane	ug/m3	2.38	2.56	2.45	2.82	2.41	2.32	NA
Chloromethane	ug/m3	0.721	0.816	0.822	0.795	0.776	0.805	390
Ethyl Alcohol	ug/m3	11.6	14.3	17.8	20	17.3	14.2	NA
Acetone	ug/m3	13	9.67	28.5	14.3	21	7.63	140000
Trichlorofluoromethane	ug/m3	1.38	1.33	1.8	2.5	1.81	1.42	3100
iso-Propyl Alcohol	ug/m3	1.49	1.26	33.9	4.69	15.9	7.55	NA
n-Hexane	ug/m3	ND	ND	1.09	2.05	0.768	ND	3100
1,1,1-Trichloroethane	ug/m3	21.2	ND	ND	ND	ND	ND	22000
Cyclohexane	ug/m3	ND	ND	ND	ND	0.802	ND	26000
Xylene (Total)	ug/m3	ND	ND	14.9	6.43	5	ND	440
Trichloroethene	ug/m3	301	ND	1.4	1.07	4.6	ND	8.8
Heptane	ug/m3	1.5	ND	0.897	0.82	1.43	ND	NA
Toluene	ug/m3	2.98	1.44	5.95	4.18	4.71	1.05	22000
Tetrachloroethene	ug/m3	13.7	15.7	58	146	25.7	5.55	180
Ethylbenzene	ug/m3	ND	ND	1.61	1.29	ND	ND	49
p/m-Xylene	ug/m3	ND	ND	7.34	4.78	3.24	ND	440
o-Xylene	ug/m3	ND	ND	7.56	1.63	1.75	ND	440
4-Ethyltoluene	ug/m3	ND	ND	38	2.05	5.46	1.25	NA
1,3,5-Trimethylbenzene	ug/m3	ND	ND	45	2.31	6.1	1.54	NA
1,2,4-Trimethylbenzene	ug/m3	2.62	1.29	140	8.01	19.4	5.21	31

ug/m3 - micrograms per cubic meter

ND - non-detect

**Bold and Shaded indicates an exceedance to the standard** 

<sup>\*</sup> Ohio Environmental Protection Agency Voluntary Action Program

# ATTACHMENT 3 LABORATORY ANALYTICAL RESULTS



#### ANALYTICAL REPORT

Lab Number: L1953592

Client: MAKsolve, LLC

261 Regency Ridge Drive

Dayton, OH 45459

ATTN: John Bowen
Phone: (937) 815-6949

Project Name: SPINNAKER

Project Number: 145-19
Report Date: 11/18/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806 508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Number: 145-19

**Lab Number:** L1953592 **Report Date:** 11/18/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1953592-01	IA-1	AIR	518 WATER ST. TROY, OH	11/08/19 16:45	11/11/19
L1953592-02	IA-2	AIR	518 WATER ST. TROY, OH	11/08/19 16:59	11/11/19
L1953592-03	IA-3	AIR	518 WATER ST. TROY, OH	11/08/19 16:52	11/11/19
L1953592-04	IA-4	AIR	518 WATER ST. TROY, OH	11/08/19 16:56	11/11/19
L1953592-05	IA-5	AIR	518 WATER ST. TROY, OH	11/08/19 16:49	11/11/19
L1953592-06	OA-1	AIR	518 WATER ST. TROY, OH	11/08/19 16:40	11/11/19



Project Name:SPINNAKERLab Number:L1953592Project Number:145-19Report Date:11/18/19

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.								



Project Name:SPINNAKERLab Number:L1953592Project Number:145-19Report Date:11/18/19

#### **Case Narrative (continued)**

Volatile Organics in Air

Canisters were released from the laboratory on November 5, 2019. The canister certification results are provided as an addendum.

The WG1308374-3 LCS recovery for benzyl chloride (136%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 11/18/19

ANALYTICAL

### **AIR**



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: Date Collected: 11/08/19 16:45

Client ID: Date Received: 11/11/19

Sample Location: 518 WATER ST. TROY, OH Field Prep: Not Specified

Sample Depth:

Matrix: Air

Anaytical Method: 48,TO-15 Analytical Date: 11/13/19 19:56

Analyst: EW

	Vdqq			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab							
Propylene	1.82	0.500		3.13	0.861			1
Dichlorodifluoromethane	0.482	0.200		2.38	0.989			1
Chloromethane	0.349	0.200		0.721	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	6.13	5.00		11.6	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	5.47	1.00		13.0	2.38			1
Trichlorofluoromethane	0.245	0.200		1.38	1.12			1
iso-Propyl Alcohol	0.605	0.500		1.49	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1



L1953592

Project Name: SPINNAKER Lab Number:

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-01

Client ID: IA-1

Sample Location: 518 WATER ST. TROY, OH

Date Collected: 11/08/19 16:45

Date Received: 11/11/19
Field Prep: Not Specified

ppbV			ug/m3				Dilution
Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Lab							
ND	0.200		ND	0.793			1
ND	0.500		ND	1.80			1
ND	0.200		ND	0.977			1
ND	0.500		ND	1.47			1
ND	0.200		ND	0.809			1
ND	0.200		ND	0.705			1
3.88	0.200		21.2	1.09			1
ND	0.200		ND	0.639			1
ND	0.200		ND	1.26			1
ND	0.200		ND	0.688			1
ND	0.200		ND	0.869			1
ND	0.200		ND	0.924			1
ND	0.200		ND	1.34			1
ND	0.200		ND	0.721			1
56.0	0.200		301	1.07			1
ND	0.200		ND	0.934			1
0.366	0.200		1.50	0.820			1
ND	0.200		ND	0.908			1
ND	0.500		ND	2.05			1
ND	0.200		ND	0.908			1
ND	0.200		ND	1.09			1
ND	0.200		ND	0.793			1
0.791	0.200		2.98	0.754			1
ND	0.200		ND	0.908			1
ND	0.200		ND	0.820			1
ND	0.200		ND	1.70			1
	ND N	Results         RL           Lab         ND         0.200           ND         0.500           ND         0.500           ND         0.500           ND         0.200           ND	Results         RL         MDL           ND         0.200            ND         0.500            ND         0.500            ND         0.500            ND         0.200            ND         0.200	Results         RL         MDL         Results           Lab           ND         0.200          ND           ND         0.500          ND           ND         0.200          ND           ND         0.500          ND           ND         0.200          ND           ND         0.200	Results         RL         MDL         Results         RL           ND         0.200          ND         0.793           ND         0.500          ND         1.80           ND         0.500          ND         0.977           ND         0.500          ND         0.977           ND         0.500          ND         0.809           ND         0.200          ND         0.639           ND         0.200          ND         0.639           ND         0.200          ND         0.688           ND         0.200          ND         0.869           ND         0.200          ND         0.721           56.0         0.200          ND         0.934           0.366	Results         RL         MDL         Results         RL         MDL           Lab           ND         0.200          ND         0.793            ND         0.500          ND         1.80            ND         0.500          ND         0.977            ND         0.500          ND         0.977            ND         0.500          ND         0.977            ND         0.500          ND         0.977            ND         0.500          ND         0.809            ND         0.200          ND         0.809            ND         0.200          ND         0.639            ND         0.200          ND         0.639            ND         0.200          ND         0.688            ND         0.200          ND         0.924            ND         0.200          ND         0.721	Results         RL         MDL         Results         RL         MDL         Qualifier           Lab         ND         0.200          ND         0.793            ND         0.500          ND         1.80            ND         0.500          ND         0.977            ND         0.500          ND         0.977            ND         0.500          ND         0.977            ND         0.500          ND         0.977            ND         0.500          ND         0.809            ND         0.200          ND         0.809            ND         0.200          ND         0.639            ND         0.200          ND         0.639            ND         0.200          ND         0.688            ND         0.200          ND         0.924            ND         0.200          ND         0.



L1953592 Report Date: 145-19

11/18/19

Lab Number:

#### **SAMPLE RESULTS**

Lab ID: L1953592-01

Client ID: IA-1

Sample Location: 518 WATER ST. TROY, OH Date Collected: 11/08/19 16:45

Date Received: 11/11/19 Field Prep: Not Specified

Sample Depth:

Project Number:

оатріє Беріп.		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	field Lab							
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Tetrachloroethene	2.02	0.200		13.7	1.36			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	ND	0.200		ND	0.869			1
p/m-Xylene	ND	0.400		ND	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	ND	0.200		ND	0.869			1
4-Ethyltoluene	ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene	ND	0.200		ND	0.983			1
1,2,4-Trimethylbenzene	0.533	0.200		2.62	0.983			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: Date Collected: 11/08/19 16:59

Client ID: IA-2 Date Received: 11/11/19

Sample Location: 518 WATER ST. TROY, OH Field Prep: Not Specified

Sample Depth:

Matrix: Air

Anaytical Method: 48,TO-15 Analytical Date: 11/13/19 20:36

Analyst: EW

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab							
Propylene	0.666	0.500		1.15	0.861			1
Dichlorodifluoromethane	0.517	0.200		2.56	0.989			1
Chloromethane	0.395	0.200		0.816	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	7.58	5.00		14.3	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	4.07	1.00		9.67	2.38			1
Trichlorofluoromethane	0.237	0.200		1.33	1.12			1
iso-Propyl Alcohol	0.513	0.500		1.26	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1



Project Number: 145-19

Lab Number:

L1953592

Report Date:

11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-02

Client ID: IA-2

Sample Location: 518 WATER ST. TROY, OH

Date Collected:
Date Received:

11/08/19 16:59

Field Prep:

11/11/19 Not Specified

Затріе Беріп.		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	sfield Lab							
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	ND	0.200		ND	0.705			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	ND	0.200		ND	0.688			1
Xylene (Total)	ND	0.200		ND	0.869			1
1,2-Dichloropropane	ND	0.200		ND	0.924			1
Bromodichloromethane	ND	0.200		ND	1.34			1
1,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	ND	0.200		ND	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Heptane	ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
trans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane	ND	0.200		ND	1.09			1
1,2-Dichloroethene (total)	ND	0.200		ND	0.793			1
Toluene	0.381	0.200		1.44	0.754			1
2-Hexanone	ND	0.200		ND	0.820			1
1,3-Dichloropropene, Total	ND	0.200		ND	0.908			1
Dibromochloromethane	ND	0.200		ND	1.70			1



Project Number: 145-19

Lab Number:

L1953592

Report Date:

11/18/19

#### SAMPLE RESULTS

Lab ID: L1953592-02

Client ID: IA-2

Sample Location: 518 WATER ST. TROY, OH

Date Collected:
Date Received:

11/08/19 16:59 11/11/19

Field Prep:

Not Specified

Sample Depth:

ppbV ug/m3 Dilution **Factor** Results RL MDL Qualifier RL**Parameter** Results MDL Volatile Organics in Air - Mansfield Lab 1,2-Dibromoethane ND 0.200 ND 1.54 1 Tetrachloroethene 0.200 --1 2.32 --15.7 1.36 Chlorobenzene ND 0.200 ND 0.921 1 Ethylbenzene ND 0.200 ND 0.869 1 ---p/m-Xylene ND 0.400 ND 1.74 1 ----Bromoform ND 0.200 ND 2.07 1 ----Styrene ND 0.200 ND 0.852 1 ----1,1,2,2-Tetrachloroethane ND 0.200 ND 1.37 1 o-Xylene 0.200 1 ND --ND 0.869 --4-Ethyltoluene ND 0.200 ND 0.983 1 ----1,3,5-Trimethylbenzene ND 0.200 ND 0.983 1 --1,2,4-Trimethylbenzene 0.262 0.200 0.983 1 --1.29 --Benzyl chloride ND 0.200 ND 1.04 1 1,3-Dichlorobenzene ND 0.200 1 ND 1.20 1,4-Dichlorobenzene 1 ND 0.200 --ND 1.20 --1,2-Dichlorobenzene ND 0.200 ND 1.20 1 1,2,4-Trichlorobenzene ND 0.200 ND 1.48 1 ----Naphthalene ND 0.200 ND 1.05 1 Hexachlorobutadiene ND 0.200 ND 1 --2.13 --

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-03 Date Collected: 11/08/19 16:52

Client ID: IA-3 Date Received: 11/11/19

Sample Location: 518 WATER ST. TROY, OH Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15 Analytical Date: 11/13/19 21:56

Analyst: EW

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab							
Propylene	6.37	0.500		11.0	0.861			1
Dichlorodifluoromethane	0.495	0.200		2.45	0.989			1
Chloromethane	0.398	0.200		0.822	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	9.47	5.00		17.8	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	12.0	1.00		28.5	2.38			1
Trichlorofluoromethane	0.320	0.200		1.80	1.12			1
iso-Propyl Alcohol	13.8	0.500		33.9	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1



Project Number: 145-19 Lab Number:

L1953592

Report Date:

11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-03

Client ID: IA-3

Sample Location: 518 WATER ST. TROY, OH Date Collected:

11/08/19 16:52

Date Received: Field Prep:

11/11/19 Not Specified

Sample Depth:		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	sfield Lab							
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	0.308	0.200		1.09	0.705			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	ND	0.200		ND	0.688			1
(ylene (Total)	3.43	0.200		14.9	0.869			1
1,2-Dichloropropane	ND	0.200		ND	0.924			1
Bromodichloromethane	ND	0.200		ND	1.34			1
1,4-Dioxane	ND	0.200		ND	0.721			1
Frichloroethene	0.261	0.200		1.40	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Heptane	0.219	0.200		0.897	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
rans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane	ND	0.200		ND	1.09			1
,2-Dichloroethene (total)	ND	0.200		ND	0.793			1
Γoluene	1.58	0.200		5.95	0.754			1
2-Hexanone	ND	0.200		ND	0.820			1
1,3-Dichloropropene, Total	ND	0.200		ND	0.908			1
Dibromochloromethane	ND	0.200		ND	1.70			1



Project Number: 145-19

Lab Number:

L1953592

Report Date:

11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-03

Client ID: IA-3

Sample Location: 518 WATER ST. TROY, OH

Date Collected:

11/08/19 16:52

Date Received: Field Prep:

11/11/19 Not Specified

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	sfield Lab							
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Tetrachloroethene	8.55	0.200		58.0	1.36			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	0.370	0.200		1.61	0.869			1
p/m-Xylene	1.69	0.400		7.34	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	1.74	0.200		7.56	0.869			1
4-Ethyltoluene	7.72	0.200		38.0	0.983			1
1,3,5-Trimethylbenzene	9.16	0.200		45.0	0.983			1
1,2,4-Trimethylbenzene	28.5	0.200		140	0.983			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140



Project Name:SPINNAKERLab Number:L1953592

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: Date Collected: 11/08/19 16:56

Client ID: Date Received: 11/11/19

Sample Location: 518 WATER ST. TROY, OH Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15 Analytical Date: 11/13/19 22:36

Analyst: EW

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab							
Propylene	2.54	0.500		4.37	0.861			1
Dichlorodifluoromethane	0.570	0.200		2.82	0.989			1
Chloromethane	0.385	0.200		0.795	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	10.6	5.00		20.0	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	6.02	1.00		14.3	2.38			1
Trichlorofluoromethane	0.445	0.200		2.50	1.12			1
iso-Propyl Alcohol	1.91	0.500		4.69	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1



L1953592

Project Name: SPINNAKER Lab Number:

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-04

Client ID: IA-4

Sample Location: 518 WATER ST. TROY, OH

Date Collected: 11/08/19 16:56

Date Received: 11/11/19
Field Prep: Not Specified

		PpbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfie	eld Lab							
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	0.581	0.200		2.05	0.705			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	ND	0.200		ND	0.688			1
,2-Dichloropropane	ND	0.200		ND	0.924			1
(ylene (Total)	1.48	0.200		6.43	0.869			1
Bromodichloromethane	ND	0.200		ND	1.34			1
,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	ND	0.200		ND	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Heptane	ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1-Methyl-2-pentanone	ND	0.500		ND	2.05			1
rans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
,1,2-Trichloroethane	ND	0.200		ND	1.09			1
,2-Dichloroethene (total)	ND	0.200		ND	0.793			1
Toluene	1.11	0.200		4.18	0.754			1
2-Hexanone	ND	0.200		ND	0.820			1
,3-Dichloropropene, Total	ND	0.200		ND	0.908			1
Dibromochloromethane	ND	0.200		ND	1.70			1



Project Number: 145-19

Lab Number:

L1953592

**Report Date:** 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-04

Client ID: IA-4

Sample Location: 518 WATER ST. TROY, OH

Date Collected: 11/08/19 16:56

Date Received: 11/11/19
Field Prep: Not Specified

Оаттріе Беріті.		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Man	sfield Lab							
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Tetrachloroethene	21.6	0.200		146	1.36			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	0.297	0.200		1.29	0.869			1
p/m-Xylene	1.10	0.400		4.78	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	0.376	0.200		1.63	0.869			1
4-Ethyltoluene	0.416	0.200		2.05	0.983			1
1,3,5-Trimethylbenzene	0.470	0.200		2.31	0.983			1
1,2,4-Trimethylbenzene	1.63	0.200		8.01	0.983			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: Date Collected: 11/08/19 16:49

Client ID: Date Received: 11/11/19

Sample Location: 518 WATER ST. TROY, OH Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15 Analytical Date: 11/13/19 23:16

Analyst: EW

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab							
Propylene	4.02	0.500		6.92	0.861			1
Dichlorodifluoromethane	0.487	0.200		2.41	0.989			1
Chloromethane	0.376	0.200		0.776	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	9.16	5.00		17.3	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	8.85	1.00		21.0	2.38			1
Trichlorofluoromethane	0.322	0.200		1.81	1.12			1
iso-Propyl Alcohol	6.46	0.500		15.9	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1



Project Number: 145-19

Lab Number:

L1953592

**Report Date:** 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-05

Client ID: IA-5

Sample Location: 518 WATER ST. TROY, OH

Date Collected:

11/08/19 16:49

Date Received:

11/11/19 Not Specific

Field Prep: Not Specified

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansf	ield Lab							
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	0.218	0.200		0.768	0.705			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	0.233	0.200		0.802	0.688			1
,2-Dichloropropane	ND	0.200		ND	0.924			1
(ylene (Total)	1.15	0.200		5.00	0.869			1
Bromodichloromethane	ND	0.200		ND	1.34			1
,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	0.856	0.200		4.60	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Heptane	0.348	0.200		1.43	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1-Methyl-2-pentanone	ND	0.500		ND	2.05			1
rans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
,1,2-Trichloroethane	ND	0.200		ND	1.09			1
1,2-Dichloroethene (total)	ND	0.200		ND	0.793			1
Toluene	1.25	0.200		4.71	0.754			1
2-Hexanone	ND	0.200		ND	0.820			1
,3-Dichloropropene, Total	ND	0.200		ND	0.908			1
Dibromochloromethane	ND	0.200		ND	1.70			1



Project Number: 145-19

Lab Number:

L1953592

Report Date:

11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-05

Client ID: IA-5

Sample Location: 518 WATER ST. TROY, OH

Date Collected:
Date Received:

11/08/19 16:49

Field Prep:

11/11/19 Not Specified

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	sfield Lab							
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Tetrachloroethene	3.79	0.200		25.7	1.36			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	ND	0.200		ND	0.869			1
p/m-Xylene	0.747	0.400		3.24	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	0.404	0.200		1.75	0.869			1
4-Ethyltoluene	1.11	0.200		5.46	0.983			1
1,3,5-Trimethylbenzene	1.24	0.200		6.10	0.983			1
1,2,4-Trimethylbenzene	3.95	0.200		19.4	0.983			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: Date Collected: 11/08/19 16:40

Client ID: OA-1 Date Received: 11/11/19

Sample Location: 518 WATER ST. TROY, OH Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15 Analytical Date: 11/13/19 19:16

Analyst: EW

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab							
Propylene	ND	0.500		ND	0.861			1
Dichlorodifluoromethane	0.470	0.200		2.32	0.989			1
Chloromethane	0.390	0.200		0.805	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	7.56	5.00		14.2	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	3.21	1.00		7.63	2.38			1
Trichlorofluoromethane	0.253	0.200		1.42	1.12			1
iso-Propyl Alcohol	3.07	0.500		7.55	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1



L1953592

Project Name: SPINNAKER

Lab Number: 145-19

Report Date: 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-06

Client ID: OA-1

Sample Location: 518 WATER ST. TROY, OH Date Collected: 11/08/19 16:40

Date Received: 11/11/19

Field Prep: Not Specified

Sample Depth:

Project Number:

		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfi	eld Lab							
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	ND	0.200		ND	0.705			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	ND	0.200		ND	0.688			1
Xylene (Total)	ND	0.200		ND	0.869			1
1,2-Dichloropropane	ND	0.200		ND	0.924			1
Bromodichloromethane	ND	0.200		ND	1.34			1
1,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	ND	0.200		ND	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Heptane	ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
trans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane	ND	0.200		ND	1.09			1
1,2-Dichloroethene (total)	ND	0.200		ND	0.793			1
Toluene	0.279	0.200		1.05	0.754			1
2-Hexanone	ND	0.200		ND	0.820			1
1,3-Dichloropropene, Total	ND	0.200		ND	0.908			1
Dibromochloromethane	ND	0.200		ND	1.70			1



Project Number: 145-19

Lab Number:

L1953592

**Report Date:** 11/18/19

#### **SAMPLE RESULTS**

Lab ID: L1953592-06

Client ID: OA-1

Sample Location: 518 WATER ST. TROY, OH

Date Collected: 11
Date Received: 11

11/08/19 16:40

Field Prep:

11/11/19 Not Specified

Оаттріе Беріті.		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results RL		MDL	Qualifier	Factor
Volatile Organics in Air - Man	sfield Lab							
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Tetrachloroethene	0.818	0.200		5.55	1.36			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	ND	0.200		ND	0.869			1
p/m-Xylene	ND	0.400		ND	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	ND	0.200		ND	0.869			1
4-Ethyltoluene	0.254	0.200		1.25	0.983			1
1,3,5-Trimethylbenzene	0.314	0.200		1.54	0.983			1
1,2,4-Trimethylbenzene	1.06	0.200		5.21	0.983			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140



Project Name:SPINNAKERLab Number:L1953592

Project Number: 145-19 Report Date: 11/18/19

### Method Blank Analysis Batch Quality Control

		ppbV		ug/m3		Dilution		
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	Lab for samp	ole(s): 01-	-06 Batch	: WG13083	374-4			
Chlorodifluoromethane	ND	0.200		ND	0.707			1
Propylene	ND	0.500		ND	0.861			1
Propane	ND	0.500		ND	0.902			1
Dichlorodifluoromethane	ND	0.200		ND	0.989			1
Chloromethane	ND	0.200		ND	0.413			1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200		ND	1.40			1
Methanol	ND	5.00		ND	6.55			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Butane	ND	0.200		ND	0.475			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethyl Alcohol	ND	5.00		ND	9.42			1
Dichlorofluoromethane	ND	0.200		ND	0.842			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acrolein	ND	0.500		ND	1.15			1
Acetone	ND	1.00		ND	2.38			1
Acetonitrile	ND	0.200		ND	0.336			1
Trichlorofluoromethane	ND	0.200		ND	1.12			1
iso-Propyl Alcohol	ND	0.500		ND	1.23			1
Acrylonitrile	ND	0.500		ND	1.09			1
Pentane	ND	0.200		ND	0.590			1
Ethyl ether	ND	0.200		ND	0.606			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
tert-Butyl Alcohol	ND	0.500		ND	1.52			1



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

### Method Blank Analysis Batch Quality Control

		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	Lab for samp	ole(s): 01-	·06 Batch	: WG13083	74-4			
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1
Xylene (Total)	ND	0.200		ND	0.869			1
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
2,2-Dichloropropane	ND	0.200		ND	0.924			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	ND	0.200		ND	0.705			1
Isopropyl Ether	ND	0.200		ND	0.836			1
Ethyl-Tert-Butyl-Ether	ND	0.200		ND	0.836			1
1,2-Dichloroethene (total)	ND	0.200		ND	0.793			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
1,1-Dichloropropene	ND	0.200		ND	0.908			1
1,3-Dichloropropene, Total	ND	0.200		ND	0.908			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1



Project Name:SPINNAKERLab Number:L1953592

Project Number: 145-19 Report Date: 11/18/19

### Method Blank Analysis Batch Quality Control

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	d Lab for samp	ole(s): 01-	-06 Batch	: WG13083	374-4			
Cyclohexane	ND	0.200		ND	0.688			1
Tertiary-Amyl Methyl Ether	ND	0.200		ND	0.836			1
Dibromomethane	ND	0.200		ND	1.42			1
1,2-Dichloropropane	ND	0.200		ND	0.924			1
Bromodichloromethane	ND	0.200		ND	1.34			1
1,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	ND	0.200		ND	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Methyl Methacrylate	ND	0.500		ND	2.05			1
Heptane	ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
trans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane	ND	0.200		ND	1.09			1
Toluene	ND	0.200		ND	0.754			1
1,3-Dichloropropane	ND	0.200		ND	0.924			1
2-Hexanone	ND	0.200		ND	0.820			1
Dibromochloromethane	ND	0.200		ND	1.70			1
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Butyl Acetate	ND	0.500		ND	2.38			1
Octane	ND	0.200		ND	0.934			1
Tetrachloroethene	ND	0.200		ND	1.36			1
1,1,1,2-Tetrachloroethane	ND	0.200		ND	1.37			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	ND	0.200		ND	0.869			1



Project Name:SPINNAKERLab Number:L1953592

Project Number: 145-19 Report Date: 11/18/19

### Method Blank Analysis Batch Quality Control

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfie	eld Lab for samp	ole(s): 01-	-06 Batch	: WG13083	374-4			
p/m-Xylene	ND	0.400		ND	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	ND	0.200		ND	0.869			1
1,2,3-Trichloropropane	ND	0.200		ND	1.21			1
Nonane (C9)	ND	0.200		ND	1.05			1
Isopropylbenzene	ND	0.200		ND	0.983			1
Bromobenzene	ND	0.200		ND	0.793			1
o-Chlorotoluene	ND	0.200		ND	1.04			1
n-Propylbenzene	ND	0.200		ND	0.983			1
p-Chlorotoluene	ND	0.200		ND	1.04			1
4-Ethyltoluene	ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene	ND	0.200		ND	0.983			1
tert-Butylbenzene	ND	0.200		ND	1.10			1
1,2,4-Trimethylbenzene	ND	0.200		ND	0.983			1
Decane (C10)	ND	0.200		ND	1.16			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
sec-Butylbenzene	ND	0.200		ND	1.10			1
p-Isopropyltoluene	ND	0.200		ND	1.10			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
n-Butylbenzene	ND	0.200		ND	1.10			1
1,2-Dibromo-3-chloropropane	ND	0.200		ND	1.93			1



Project Name: SPINNAKER Lab Number: L1953592

Project Number: 145-19 Report Date: 11/18/19

### Method Blank Analysis Batch Quality Control

			ug/m3	_	Dilution			
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfi	eld Lab for samp	ole(s): 01	-06 Batcl	h: WG13083	74-4			
Undecane	ND	0.200		ND	1.28			1
Dodecane (C12)	ND	0.200		ND	1.39			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
1,2,3-Trichlorobenzene	ND	0.200		ND	1.48			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1



Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics in Air - Mansfield Lab As	ssociated sample(s):	01-06	Batch: WG130837	<b>'</b> 4-3				
Chlorodifluoromethane	87		-		70-130	-		
Propylene	102		-		70-130	-		
Propane	88		-		70-130	-		
Dichlorodifluoromethane	102		-		70-130	-		
Chloromethane	84		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97		-		70-130	-		
Methanol	83		-		70-130	-		
Vinyl chloride	99		-		70-130	-		
1,3-Butadiene	93		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	104		-		70-130	-		
Chloroethane	97		-		70-130	•		
Ethyl Alcohol	87		-		40-160	-		
Dichlorofluoromethane	91		-		70-130	•		
Vinyl bromide	96		-		70-130	-		
Acrolein	84		-		70-130	-		
Acetone	79		-		40-160	-		
Acetonitrile	83		-		70-130	-		
Trichlorofluoromethane	117		-		70-130	-		
iso-Propyl Alcohol	80		-		40-160	-		
Acrylonitrile	84		-		70-130	-		
Pentane	87		-		70-130	-		
Ethyl ether	91		-		70-130	-		



Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
/olatile Organics in Air - Mansfield Lab	Associated sample(s):	01-06	Batch: WG130837	<b>7</b> 4-3				
1,1-Dichloroethene	101		-		70-130	-		
tert-Butyl Alcohol	90		-		70-130	-		
Methylene chloride	89		-		70-130	-		
3-Chloropropene	89		-		70-130	-		
Carbon disulfide	80		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	102		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
Methyl tert butyl ether	108		-		70-130	-		
Vinyl acetate	98		-		70-130	-		
2-Butanone	98		-		70-130	-		
cis-1,2-Dichloroethene	103		-		70-130	-		
Ethyl Acetate	120		-		70-130	-		
Chloroform	112		-		70-130	-		
Tetrahydrofuran	99		-		70-130	-		
2,2-Dichloropropane	105		-		70-130	-		
1,2-Dichloroethane	114		-		70-130	-		
n-Hexane	96		-		70-130	-		
Isopropyl Ether	97		-		70-130	-		
Ethyl-Tert-Butyl-Ether	98		-		70-130	-		
1,2-Dichloroethene (total)	100		-			-		
1,2-Dichloroethene (total)	100		-			-		
1,1,1-Trichloroethane	108		-		70-130	-		



Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics in Air - Mansfield Lab As	sociated sample(s):	01-06 E	Batch: WG13083	74-3				
1,1-Dichloropropene	88		-		70-130	-		
Benzene	93		-		70-130	-		
Carbon tetrachloride	114		-		70-130	-		
Cyclohexane	95		-		70-130	-		
Tertiary-Amyl Methyl Ether	92		-		70-130	-		
Dibromomethane	95		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	105		-		70-130	-		
1,4-Dioxane	105		-		70-130	-		
Trichloroethene	101		-		70-130	-		
2,2,4-Trimethylpentane	100		-		70-130	-		
Methyl Methacrylate	72		-		40-160	-		
Heptane	88		-		70-130	-		
cis-1,3-Dichloropropene	98		-		70-130	-		
4-Methyl-2-pentanone	95		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	100		-		70-130	-		
Toluene	93		-		70-130	-		
1,3-Dichloropropane	84		-		70-130	-		
2-Hexanone	82		-		70-130	-		
Dibromochloromethane	108		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Butyl Acetate	76		-		70-130	-		



Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics in Air - Mansfield Lab Ass	sociated sample(s)	01-06	Batch: WG130837	74-3				
Octane	90		-		70-130	-		
Tetrachloroethene	95		-		70-130	-		
1,1,1,2-Tetrachloroethane	96		-		70-130	-		
Chlorobenzene	95		-		70-130	-		
Ethylbenzene	97		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	94		-		70-130	-		
1,1,2,2-Tetrachloroethane	109		-		70-130	-		
o-Xylene	101		-		70-130	-		
1,2,3-Trichloropropane	92		-		70-130	-		
Nonane (C9)	80		-		70-130	-		
Isopropylbenzene	94		-		70-130	-		
Bromobenzene	91		-		70-130	-		
o-Chlorotoluene	94		-		70-130	-		
n-Propylbenzene	100		-		70-130	-		
p-Chlorotoluene	100		-		70-130	-		
4-Ethyltoluene	102		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
tert-Butylbenzene	108		-		70-130	-		
1,2,4-Trimethylbenzene	111		-		70-130	-		
Decane (C10)	108		-		70-130	-		
Benzyl chloride	136	Q	-		70-130	-		



# Lab Control Sample Analysis Batch Quality Control

Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

**Report Date:** 11/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
/olatile Organics in Air - Mansfield Lab Ass	sociated sample(s):	01-06	Batch: WG130837	4-3				
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	109		-		70-130	-		
sec-Butylbenzene	104		-		70-130	-		
p-Isopropyltoluene	107		-		70-130	-		
1,2-Dichlorobenzene	114		-		70-130	-		
n-Butylbenzene	121		-		70-130	-		
1,2-Dibromo-3-chloropropane	118		-		70-130	-		
Undecane	102		-		70-130	-		
Dodecane (C12)	89		-		70-130	-		
1,2,4-Trichlorobenzene	120		-		70-130	-		
Naphthalene	116		-		70-130	-		
1,2,3-Trichlorobenzene	102		-		70-130	-		
Hexachlorobutadiene	114		-		70-130	-		

**Project Name:** SPINNAKER

**Project Number:** 145-19

L1953592 11/18/19 Report Date:

Lab Number:

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-06	QC Batch ID: WG1308374-5	QC Sample:	L1953592-0	02 Client ID:	IA-2
Propylene	0.666	0.702	ppbV	5		25
Dichlorodifluoromethane	0.517	0.522	ppbV	1		25
Chloromethane	0.395	0.411	ppbV	4		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	7.58	7.72	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	4.07	4.15	ppbV	2		25
Trichlorofluoromethane	0.237	0.245	ppbV	3		25
iso-Propyl Alcohol	0.513	0.509	ppbV	1		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25



Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

**Report Date:** 11/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-06	QC Batch ID: WG1308374-5	QC Sample:	L1953592-0	02 Client ID:	IA-2
Vinyl acetate	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
Xylene (Total)	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25



Project Name: SPINNAKER

**Project Number:** 145-19

Lab Number: L1953592

**Report Date:** 11/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Qual Limits
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-06	QC Batch ID: WG1308374-5	QC Sample:	L1953592-	-02 Client ID: IA-2
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
1,2-Dichloroethene (total)	ND	ND	ppbV	NC	25
Toluene	0.381	0.398	ppbV	4	25
1,3-Dichloropropene, Total	ND	ND	ppbV	NC	25
2-Hexanone	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	2.32	2.31	ppbV	0	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
p/m-Xylene	ND	ND	ppbV	NC	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	0.262	0.256	ppbV	2	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25



Lab Number:

L1953592

Report Date:

11/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Volatile Organics in Air - Mansfield Lab A	associated sample(s): 01-06	QC Batch ID: WG1308374-5	QC Sample:	L1953592-	02 Client ID:	IA-2
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Naphthalene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

**Project Name:** 

**Project Number:** 145-19

SPINNAKER

Lab Number: L1953592

**Report Date:** 11/18/19

Project Number: 145-19

SPINNAKER

Project Name:

# **Canister and Flow Controller Information**

			Media Type	Date	Bottle	Cleaning	Can Leak	Initial Pressure	Pressure on Receipt	Flow Controler	Flow Out mL/min	Flow In	0/ 555
Samplenum	Client ID	Media ID		Prepared	Order	Batch ID	Check	(in. Hg)	(in. Hg)	Leak Chk	mL/min	mL/min	% RPD
L1953592-01	IA-1	0909	Flow 4	11/05/19	306517		-	-	-	Pass	4.5	4.6	2
L1953592-01	IA-1	2431	2.7L Can	11/05/19	306517	L1950855-05	Pass	-29.7	-7.1	-	-	-	-
L1953592-02	IA-2	0301	Flow 4	11/05/19	306517		-	-	-	Pass	4.5	6.2	32
L1953592-02	IA-2	191	2.7L Can	11/05/19	306517	L1950855-05	Pass	-29.3	-2.5	-	-	-	-
L1953592-03	IA-3	0790	Flow 4	11/05/19	306517		-	-	-	Pass	4.5	4.1	9
L1953592-03	IA-3	2430	2.7L Can	11/05/19	306517	L1951136-04	Pass	-29.5	-10.1	-	-	-	-
L1953592-04	IA-4	01444	Flow 4	11/05/19	306517		-	-	-	Pass	4.5	4.6	2
L1953592-04	IA-4	2863	2.7L Can	11/05/19	306517	L1950855-05	Pass	-29.5	-9.7	-	-	-	-
L1953592-05	IA-5	01206	Flow 5	11/05/19	306517		-	-	-	Pass	4.5	4.6	2
L1953592-05	IA-5	2871	2.7L Can	11/05/19	306517	L1950855-05	Pass	-29.5	-11.5	-	-	-	
L1953592-06	OA-1	0952	Flow 5	11/05/19	306517		-	-	-	Pass	4.5	4.9	9
L1953592-06	OA-1	2737	2.7L Can	11/05/19	306517	L1950855-05	Pass	-29.5	-8.8	-	-	-	-



L1950855

Lab Number:

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1950855-05 Date Collected: 10/28/19 16:00

Client ID: CAN 407 SHELF 3 Date Received: 10/29/19

Sample Location: Field Prep: Not Specified

Sample Depth:

Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/29/19 20:15

Analyst: TS

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfiel	d Lab							
Chlorodifluoromethane	ND	0.200		ND	0.707			1
Propylene	ND	0.500		ND	0.861			1
Propane	ND	0.500		ND	0.902			1
Dichlorodifluoromethane	ND	0.200		ND	0.989			1
Chloromethane	ND	0.200		ND	0.413			1
Freon-114	ND	0.200		ND	1.40			1
Methanol	ND	5.00		ND	6.55			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Butane	ND	0.200		ND	0.475			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethanol	ND	5.00		ND	9.42			1
Dichlorofluoromethane	ND	0.200		ND	0.842			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acrolein	ND	0.500		ND	1.15			1
Acetone	ND	1.00		ND	2.38			1
Acetonitrile	ND	0.200		ND	0.336			1
Trichlorofluoromethane	ND	0.200		ND	1.12			1
Isopropanol	ND	0.500		ND	1.23			1
Acrylonitrile	ND	0.500		ND	1.09			1
Pentane	ND	0.200		ND	0.590			1
Ethyl ether	ND	0.200		ND	0.606			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1



L1950855

Lab Number:

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

 Lab ID:
 L1950855-05
 Date Collected:
 10/28/19 16:00

 Client ID:
 CAN 407 SHELF 3
 Date Received:
 10/29/19

Client ID: CAN 407 SHELF 3 Date Received: 10/29/19
Sample Location: Field Prep: Not Specified

Sample Depth:		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500		ND	1.52			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
Freon-113	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
2-Butanone	ND	0.500		ND	1.47			1
Xylenes, total	ND	0.600		ND	0.869			1
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
2,2-Dichloropropane	ND	0.200		ND	0.924			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	ND	0.200		ND	0.705			1
Diisopropyl ether	ND	0.200		ND	0.836			1
tert-Butyl Ethyl Ether	ND	0.200		ND	0.836			1
1,2-Dichloroethene (total)	ND	1.00		ND	1.00			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
1,1-Dichloropropene	ND	0.200		ND	0.908			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	ND	0.200		ND	0.688			1
tert-Amyl Methyl Ether	ND	0.200		ND	0.836			1



L1950855

10/28/19 16:00

Lab Number:

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1950855-05 Date Collected: Client ID: CAN 407 SHELF 3

Client ID: CAN 407 SHELF 3 Date Received: 10/29/19

Sample Location: Field Prep: Not Specified

Запре Верш.		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield Lab	)							
Dibromomethane	ND	0.200		ND	1.42			1
1,2-Dichloropropane	ND	0.200		ND	0.924			1
Bromodichloromethane	ND	0.200		ND	1.34			1
1,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	ND	0.200		ND	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Methyl Methacrylate	ND	0.500		ND	2.05			1
Heptane	ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
rans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane	ND	0.200		ND	1.09			1
Toluene	ND	0.200		ND	0.754			1
1,3-Dichloropropane	ND	0.200		ND	0.924			1
2-Hexanone	ND	0.200		ND	0.820			1
Dibromochloromethane	ND	0.200		ND	1.70			1
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Butyl acetate	ND	0.500		ND	2.38			1
Octane	ND	0.200		ND	0.934			1
Tetrachloroethene	ND	0.200		ND	1.36			1
1,1,1,2-Tetrachloroethane	ND	0.200		ND	1.37			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	ND	0.200		ND	0.869			1
o/m-Xylene	ND	0.400		ND	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1



L1950855

Lab Number:

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

 Lab ID:
 L1950855-05
 Date Collected:
 10/28/19 16:00

 Client ID:
 CAN 407 SHELF 3
 Date Received:
 10/29/19

Client ID: CAN 407 SHELF 3 Date Received: 10/29/19
Sample Location: Field Prep: Not Specified

атріе Берт.		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield La	b							
o-Xylene	ND	0.200		ND	0.869			1
1,2,3-Trichloropropane	ND	0.200		ND	1.21			1
Nonane	ND	0.200		ND	1.05			1
Isopropylbenzene	ND	0.200		ND	0.983			1
Bromobenzene	ND	0.200		ND	0.793			1
2-Chlorotoluene	ND	0.200		ND	1.04			1
n-Propylbenzene	ND	0.200		ND	0.983			1
4-Chlorotoluene	ND	0.200		ND	1.04			1
4-Ethyltoluene	ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene	ND	0.200		ND	0.983			1
tert-Butylbenzene	ND	0.200		ND	1.10			1
1,2,4-Trimethylbenzene	ND	0.200		ND	0.983			1
Decane	ND	0.200		ND	1.16			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
sec-Butylbenzene	ND	0.200		ND	1.10			1
p-Isopropyltoluene	ND	0.200		ND	1.10			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
n-Butylbenzene	ND	0.200		ND	1.10			1
1,2-Dibromo-3-chloropropane	ND	0.200		ND	1.93			1
Undecane	ND	0.200		ND	1.28			1
Dodecane	ND	0.200		ND	1.39			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
1,2,3-Trichlorobenzene	ND	0.200		ND	1.48			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1



Project Name: BATCH CANISTER CERTIFICATION Lab Number: L1950855

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1950855-05

Client ID: CAN 407 SHELF 3

Sample Location:

Date Collected:

10/28/19 16:00

Date Received:

10/29/19

Field Prep:

Not Specified

Sample Depth:

Parameter Results RL MDL Results RL MDL Qualifier Factor

Volatile Organics in Air - Mansfield Lab

Dilution
Results Qualifier Units RDL Factor

Tentatively Identified Compounds

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	97		60-140



L1950855

Lab Number:

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1950855-05 Date Collected: 10/28/19 16:00

Client ID: CAN 407 SHELF 3 Date Received: 10/29/19

Sample Location: Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM Analytical Date: 10/29/19 20:15

Analyst: EW

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM	l - Mansfield Lab							
Dichlorodifluoromethane	ND	0.200		ND	0.989			1
Chloromethane	ND	0.200		ND	0.413			1
Freon-114	ND	0.050		ND	0.349			1
Vinyl chloride	ND	0.020		ND	0.051			1
1,3-Butadiene	ND	0.020		ND	0.044			1
Bromomethane	ND	0.020		ND	0.078			1
Chloroethane	ND	0.100		ND	0.264			1
Acetone	ND	1.00		ND	2.38			1
Trichlorofluoromethane	ND	0.050		ND	0.281			1
Acrylonitrile	ND	0.500		ND	1.09			1
1,1-Dichloroethene	ND	0.020		ND	0.079			1
Methylene chloride	ND	0.500		ND	1.74			1
Freon-113	ND	0.050		ND	0.383			1
trans-1,2-Dichloroethene	ND	0.020		ND	0.079			1
1,1-Dichloroethane	ND	0.020		ND	0.081			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
2-Butanone	ND	0.500		ND	1.47			1
cis-1,2-Dichloroethene	ND	0.020		ND	0.079			1
Chloroform	ND	0.020		ND	0.098			1
1,2-Dichloroethane	ND	0.020		ND	0.081			1
1,1,1-Trichloroethane	ND	0.020		ND	0.109			1
Benzene	ND	0.100		ND	0.319			1
Carbon tetrachloride	ND	0.020		ND	0.126			1
1,2-Dichloropropane	ND	0.020		ND	0.092			1



L1950855

Lab Number:

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

 Lab ID:
 L1950855-05
 Date Collected:
 10/28/19 16:00

 Client ID:
 CAN 407 SHELF 3
 Date Received:
 10/29/19

Client ID: CAN 407 SHELF 3 Date Received: 10/29/19
Sample Location: Field Prep: Not Specified

	<u> </u>	ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM -	- Mansfield Lab							
Bromodichloromethane	ND	0.020		ND	0.134			1
1,4-Dioxane	ND	0.100		ND	0.360			1
Trichloroethene	ND	0.020		ND	0.107			1
cis-1,3-Dichloropropene	ND	0.020		ND	0.091			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
trans-1,3-Dichloropropene	ND	0.020		ND	0.091			1
1,1,2-Trichloroethane	ND	0.020		ND	0.109			1
Toluene	ND	0.050		ND	0.188			1
Dibromochloromethane	ND	0.020		ND	0.170			1
1,2-Dibromoethane	ND	0.020		ND	0.154			1
Tetrachloroethene	ND	0.020		ND	0.136			1
1,1,1,2-Tetrachloroethane	ND	0.020		ND	0.137			1
Chlorobenzene	ND	0.100		ND	0.461			1
Ethylbenzene	ND	0.020		ND	0.087			1
o/m-Xylene	ND	0.040		ND	0.174			1
Bromoform	ND	0.020		ND	0.207			1
Styrene	ND	0.020		ND	0.085			1
1,1,2,2-Tetrachloroethane	ND	0.020		ND	0.137			1
o-Xylene	ND	0.020		ND	0.087			1
Isopropylbenzene	ND	0.200		ND	0.983			1
4-Ethyltoluene	ND	0.020		ND	0.098			1
1,3,5-Trimethybenzene	ND	0.020		ND	0.098			1
1,2,4-Trimethylbenzene	ND	0.020		ND	0.098			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.020		ND	0.120			1
1,4-Dichlorobenzene	ND	0.020		ND	0.120			1
sec-Butylbenzene	ND	0.200		ND	1.10			1



L1950855

10/28/19 16:00

Lab Number:

**Project Name: BATCH CANISTER CERTIFICATION** 

**Project Number:** CANISTER QC BAT **Report Date:** 11/18/19

# **Air Canister Certification Results**

Lab ID: L1950855-05

Date Collected: Client ID: CAN 407 SHELF 3

Date Received: 10/29/19 Field Prep: Not Specified

Sample Depth:

Sample Location:

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM	- Mansfield Lab							
p-Isopropyltoluene	ND	0.200		ND	1.10			1
1,2-Dichlorobenzene	ND	0.020		ND	0.120			1
n-Butylbenzene	ND	0.200		ND	1.10			1
1,2,4-Trichlorobenzene	ND	0.050		ND	0.371			1
Naphthalene	ND	0.050		ND	0.262			1
1,2,3-Trichlorobenzene	ND	0.050		ND	0.371			1
Hexachlorobutadiene	ND	0.050		ND	0.533			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	99		60-140
bromochloromethane	103		60-140
chlorobenzene-d5	96		60-140



Project Name: BATCH CANISTER CERTIFICATION Lab Number: L1951136

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04 Date Collected: 10/29/19 16:00

Client ID: CAN 392 SHELF 13 Date Received: 10/30/19

Sample Location: Field Prep: Not Specified

Sample Depth:

Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/30/19 22:06

Analyst: TS

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfiel	d Lab							
Chlorodifluoromethane	ND	0.200		ND	0.707			1
Propylene	ND	0.500		ND	0.861			1
Propane	ND	0.500		ND	0.902			1
Dichlorodifluoromethane	ND	0.200		ND	0.989			1
Chloromethane	ND	0.200		ND	0.413			1
Freon-114	ND	0.200		ND	1.40			1
Methanol	ND	5.00		ND	6.55			1
Vinyl chloride	ND	0.200		ND	0.511			1
1,3-Butadiene	ND	0.200		ND	0.442			1
Butane	ND	0.200		ND	0.475			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethanol	ND	5.00		ND	9.42			1
Dichlorofluoromethane	ND	0.200		ND	0.842			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acrolein	ND	0.500		ND	1.15			1
Acetone	ND	1.00		ND	2.38			1
Acetonitrile	ND	0.200		ND	0.336			1
Trichlorofluoromethane	ND	0.200		ND	1.12			1
Isopropanol	ND	0.500		ND	1.23			1
Acrylonitrile	ND	0.500		ND	1.09			1
Pentane	ND	0.200		ND	0.590			1
Ethyl ether	ND	0.200		ND	0.606			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1



L1951136

10/29/19 16:00

Lab Number:

**Project Name: BATCH CANISTER CERTIFICATION** 

**Project Number:** CANISTER QC BAT **Report Date:** 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04

Date Collected: Client ID: **CAN 392 SHELF 13** Date Received:

Sample Location:

10/30/19 Field Prep: Not Specified

Запре Берш.		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield Lab	)							
Tertiary butyl Alcohol	ND	0.500		ND	1.52			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
Freon-113	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
Vinyl acetate	ND	1.00		ND	3.52			1
Xylenes, total	ND	0.600		ND	0.869			1
2-Butanone	ND	0.500		ND	1.47			1
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1
n-Hexane	ND	0.200		ND	0.705			1
Diisopropyl ether	ND	0.200		ND	0.836			1
tert-Butyl Ethyl Ether	ND	0.200		ND	0.836			1
1,2-Dichloroethene (total)	ND	1.00		ND	1.00			1
1,1,1-Trichloroethane	ND	0.200		ND	1.09			1
1,1-Dichloropropene	ND	0.200		ND	0.908			1
Benzene	ND	0.200		ND	0.639			1
Carbon tetrachloride	ND	0.200		ND	1.26			1
Cyclohexane	ND	0.200		ND	0.688			1
tert-Amyl Methyl Ether	ND	0.200		ND	0.836			1
Dibromomethane	ND	0.200		ND	1.42			1



L1951136

Lab Number:

**Project Name: BATCH CANISTER CERTIFICATION** 

**Project Number:** CANISTER QC BAT **Report Date:** 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04

Date Collected: 10/29/19 16:00 Client ID: **CAN 392 SHELF 13** Date Received: 10/30/19

Sample Location:

Field Prep: Not Specified

Запріє Беріп.		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield Lab	ı							
1,2-Dichloropropane	ND	0.200		ND	0.924			1
Bromodichloromethane	ND	0.200		ND	1.34			1
1,4-Dioxane	ND	0.200		ND	0.721			1
Trichloroethene	ND	0.200		ND	1.07			1
2,2,4-Trimethylpentane	ND	0.200		ND	0.934			1
Methyl Methacrylate	ND	0.500		ND	2.05			1
Heptane	ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
trans-1,3-Dichloropropene	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane	ND	0.200		ND	1.09			1
Toluene	ND	0.200		ND	0.754			1
1,3-Dichloropropane	ND	0.200		ND	0.924			1
2-Hexanone	ND	0.200		ND	0.820			1
Dibromochloromethane	ND	0.200		ND	1.70			1
1,2-Dibromoethane	ND	0.200		ND	1.54			1
Butyl acetate	ND	0.500		ND	2.38			1
Octane	ND	0.200		ND	0.934			1
Tetrachloroethene	ND	0.200		ND	1.36			1
1,1,1,2-Tetrachloroethane	ND	0.200		ND	1.37			1
Chlorobenzene	ND	0.200		ND	0.921			1
Ethylbenzene	ND	0.200		ND	0.869			1
p/m-Xylene	ND	0.400		ND	1.74			1
Bromoform	ND	0.200		ND	2.07			1
Styrene	ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37			1
o-Xylene	ND	0.200		ND	0.869			1



L1951136

10/29/19 16:00

Lab Number:

**Project Name: BATCH CANISTER CERTIFICATION** 

**Project Number:** CANISTER QC BAT **Report Date:** 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04

Date Collected: Client ID: **CAN 392 SHELF 13** 

Date Received: 10/30/19 Field Prep: Not Specified

Sample Depth:

Sample Location:

Sample Depth:		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfie	ld Lab							
1,2,3-Trichloropropane	ND	0.200		ND	1.21			1
Nonane	ND	0.200		ND	1.05			1
Isopropylbenzene	ND	0.200		ND	0.983			1
Bromobenzene	ND	0.200		ND	0.793			1
2-Chlorotoluene	ND	0.200		ND	1.04			1
n-Propylbenzene	ND	0.200		ND	0.983			1
4-Chlorotoluene	ND	0.200		ND	1.04			1
4-Ethyltoluene	ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene	ND	0.200		ND	0.983			1
tert-Butylbenzene	ND	0.200		ND	1.10			1
1,2,4-Trimethylbenzene	ND	0.200		ND	0.983			1
Decane	ND	0.200		ND	1.16			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.200		ND	1.20			1
1,4-Dichlorobenzene	ND	0.200		ND	1.20			1
sec-Butylbenzene	ND	0.200		ND	1.10			1
o-Isopropyltoluene	ND	0.200		ND	1.10			1
1,2-Dichlorobenzene	ND	0.200		ND	1.20			1
n-Butylbenzene	ND	0.200		ND	1.10			1
1,2-Dibromo-3-chloropropane	ND	0.200		ND	1.93			1
Undecane	ND	0.200		ND	1.28			1
Dodecane	ND	0.200		ND	1.39			1
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48			1
Naphthalene	ND	0.200		ND	1.05			1
1,2,3-Trichlorobenzene	ND	0.200		ND	1.48			1
Hexachlorobutadiene	ND	0.200		ND	2.13			1



Project Name: BATCH CANISTER CERTIFICATION Lab Number: L1951136

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04

Client ID: CAN 392 SHELF 13

Sample Location:

Date Collected:

10/29/19 16:00

Date Received:

10/30/19

Field Prep:

Not Specified

Sample Depth:

Parameter Results RL MDL Results RL MDL Qualifier Factor

Volatile Organics in Air - Mansfield Lab

Dilution
Results Qualifier Units RDL Factor

**Tentatively Identified Compounds** 

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	97		60-140



L1951136

Not Specified

Lab Number:

Field Prep:

**Project Name: BATCH CANISTER CERTIFICATION** 

**Project Number:** CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04 Date Collected: 10/29/19 16:00

Client ID: **CAN 392 SHELF 13** Date Received: 10/30/19 Sample Location:

Sample Depth:

Matrix: Air

Anaytical Method: 48,TO-15-SIM Analytical Date: 10/30/19 22:06

Analyst: TS

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM -	Mansfield Lab							
Dichlorodifluoromethane	ND	0.200		ND	0.989			1
Chloromethane	ND	0.200		ND	0.413			1
Freon-114	ND	0.050		ND	0.349			1
Vinyl chloride	ND	0.020		ND	0.051			1
1,3-Butadiene	ND	0.020		ND	0.044			1
Bromomethane	ND	0.020		ND	0.078			1
Chloroethane	ND	0.100		ND	0.264			1
Acetone	ND	1.00		ND	2.38			1
Trichlorofluoromethane	ND	0.050		ND	0.281			1
Acrylonitrile	ND	0.500		ND	1.09			1
1,1-Dichloroethene	ND	0.020		ND	0.079			1
Methylene chloride	ND	0.500		ND	1.74			1
Freon-113	ND	0.050		ND	0.383			1
trans-1,2-Dichloroethene	ND	0.020		ND	0.079			1
1,1-Dichloroethane	ND	0.020		ND	0.081			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
2-Butanone	ND	0.500		ND	1.47			1
cis-1,2-Dichloroethene	ND	0.020		ND	0.079			1
Chloroform	ND	0.020		ND	0.098			1
1,2-Dichloroethane	ND	0.020		ND	0.081			1
1,1,1-Trichloroethane	ND	0.020		ND	0.109			1
Benzene	ND	0.100		ND	0.319			1
Carbon tetrachloride	ND	0.020		ND	0.126			1
1,2-Dichloropropane	ND	0.020		ND	0.092			1



L1951136

Lab Number:

**Project Name: BATCH CANISTER CERTIFICATION** 

**Project Number:** CANISTER QC BAT **Report Date:** 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04

Date Collected: 10/29/19 16:00 Client ID: **CAN 392 SHELF 13** Date Received:

Sample Location:

10/30/19 Field Prep: Not Specified

	<u> </u>	ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM -	- Mansfield Lab							
Bromodichloromethane	ND	0.020		ND	0.134			1
1,4-Dioxane	ND	0.100		ND	0.360			1
Trichloroethene	ND	0.020		ND	0.107			1
cis-1,3-Dichloropropene	ND	0.020		ND	0.091			1
4-Methyl-2-pentanone	ND	0.500		ND	2.05			1
trans-1,3-Dichloropropene	ND	0.020		ND	0.091			1
1,1,2-Trichloroethane	ND	0.020		ND	0.109			1
Toluene	ND	0.050		ND	0.188			1
Dibromochloromethane	ND	0.020		ND	0.170			1
1,2-Dibromoethane	ND	0.020		ND	0.154			1
Tetrachloroethene	ND	0.020		ND	0.136			1
1,1,1,2-Tetrachloroethane	ND	0.020		ND	0.137			1
Chlorobenzene	ND	0.100		ND	0.461			1
Ethylbenzene	ND	0.020		ND	0.087			1
o/m-Xylene	ND	0.040		ND	0.174			1
Bromoform	ND	0.020		ND	0.207			1
Styrene	ND	0.020		ND	0.085			1
1,1,2,2-Tetrachloroethane	ND	0.020		ND	0.137			1
o-Xylene	ND	0.020		ND	0.087			1
Isopropylbenzene	ND	0.200		ND	0.983			1
4-Ethyltoluene	ND	0.020		ND	0.098			1
1,3,5-Trimethybenzene	ND	0.020		ND	0.098			1
1,2,4-Trimethylbenzene	ND	0.020		ND	0.098			1
Benzyl chloride	ND	0.200		ND	1.04			1
1,3-Dichlorobenzene	ND	0.020		ND	0.120			1
1,4-Dichlorobenzene	ND	0.020		ND	0.120			1
sec-Butylbenzene	ND	0.200		ND	1.10			1



Project Name: BATCH CANISTER CERTIFICATION Lab Number: L1951136

Project Number: CANISTER QC BAT Report Date: 11/18/19

# **Air Canister Certification Results**

Lab ID: L1951136-04

Client ID: CAN 392 SHELF 13

Sample Location:

Date Collected:

10/29/19 16:00

Date Received:

10/30/19

Field Prep:

Not Specified

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM	- Mansfield Lab							
p-Isopropyltoluene	ND	0.200		ND	1.10			1
1,2-Dichlorobenzene	ND	0.020		ND	0.120			1
n-Butylbenzene	ND	0.200		ND	1.10			1
1,2,4-Trichlorobenzene	ND	0.050		ND	0.371			1
Naphthalene	ND	0.050		ND	0.262			1
1,2,3-Trichlorobenzene	ND	0.050		ND	0.371			1
Hexachlorobutadiene	ND	0.050		ND	0.533			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140



*Lab Number:* L1953592

Report Date: 11/18/19

# Sample Receipt and Container Information

Were project specific reporting limits specified?

**SPINNAKER** 

**Cooler Information** 

Project Number: 145-19

Project Name:

CoolerCustody SealNAPresent/Intact

Container Info	rmation		Initial	Final	Temp		Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C Pres	Seal	Date/Time	Analysis(*)
L1953592-01A	Canister - 2.7 Liter	NA	NA		Υ	Absent		TO15-LL(30)
L1953592-02A	Canister - 2.7 Liter	NA	NA		Υ	Absent		TO15-LL(30)
L1953592-03A	Canister - 2.7 Liter	NA	NA		Υ	Absent		TO15-LL(30)
L1953592-04A	Canister - 2.7 Liter	NA	NA		Υ	Absent		TO15-LL(30)
L1953592-05A	Canister - 2.7 Liter	NA	NA		Υ	Absent		TO15-LL(30)
L1953592-06A	Canister - 2.7 Liter	NA	NA		Υ	Absent		TO15-LL(30)



**Project Name:** Lab Number: SPINNAKER L1953592 **Project Number: Report Date:** 145-19 11/18/19

#### GLOSSARY

#### **Acronyms**

**EDL** 

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

**EMPC** - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration. **EPA** 

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD Laboratory Control Sample Duplicate: Refer to LCS.

Environmental Protection Agency.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

MDI - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated

using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD

- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

#### **Footnotes**

Report Format: Data Usability Report



Project Name:SPINNAKERLab Number:L1953592Project Number:145-19Report Date:11/18/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### **Terms**

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a "Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### **Data Qualifiers**

- A -Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- ${\bf E} \qquad \hbox{-Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.}$
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- **ND** Not detected at the reporting limit (RL) for the sample.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q -The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- $\boldsymbol{R}$  Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: Data Usability Report



Project Name:SPINNAKERLab Number:L1953592Project Number:145-19Report Date:11/18/19

#### REFERENCES

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

#### **LIMITATION OF LIABILITIES**

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial\_No:11181912:35

ID No.:17873 Revision 15

Published Date: 8/15/2019 9:53:42 AM

Page 1 of 1

#### Certification Information

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-

Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

# **Mansfield Facility**

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kieldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

### **Mansfield Facility:**

#### Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

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320 Forbes Blvd, Ma TEL: 508-822-9300	CHAIN OF CUSTODY ansfield, MA 02048 FAX: 508-822-3288	Project Info	Spinnake			□ FAX		ation -	Data D	elivera	bles		ng Infor	mation ent info PO#	
Dayton,		Project Locatio Project #: Project Manage ALPHA Quote Turn-Aroun	n: 518 Water 145-19 er: John #:	Bowe	1	□ EM.	Ex Criteria Che (Detault base Other Form AlL (stand litional Del to: (if attents	ad on Regu nats: ard pdf r liverable	eport) s:	ria Indicale	d)	Regu State/O	Service I	Requirement Program UAP	s/Report Limits Res / Comm
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May 1, 2020

Mr. Stuart Postle President Spinnaker Coating 518 East Water Street Troy, Ohio 45373

RE: SUB-SLAB DEPRESSURIZATION SYSTEM INSTALLATION

SPINNAKER COATING
518 EAST WATER STREET
TROY, MIAMI COUNTY, OHIO 45373
MAKSOLVE PROJECT NUMBER 028-20

Dear Mr. Postle:

MAKSolve has completed installation of a Sub-Slab Depressurization System (SSDS) at the Spinnaker Coating building, located at 518 East Water Street in Troy, Ohio 45373 (subject property). The SSDS was installed to mitigate elevated indoor air concentrations of Trichloroethylene (TCE) discovered in an accessible crawl space area of the subject building during an Indoor Air Assessment (Assessment) conducted on November 8, 2019 by MAKSolve. The indoor air levels of TCE were presumed to be due to the movement of impacted soil gas surrounding this portion of the subject building, migrating into the ambient air of the crawl space via vapor intrusion. During the November 2019 Assessment, TCE was detected at 301 micrograms per cubic meter ( $\mu g/m^3$ ) within the crawl space area beneath the loading dock of the subject building. The detected TCE concentration exceeded the Ohio Environmental Protection Agency (Ohio EPA), Voluntary Action Program (VAP) Generic Indoor Air Standard (GIAS) Due to Vapor Intrusion For a Single Chemical (commercial/industrial land use category) of 8.8  $\mu g/m^3$ .

On March 11, 2020, the SSDS was installed. The SSDS consists of two (2) extraction points through the crawlspace concrete floor, into which 3" diameter, schedule 40 piping is connected to facilitate vapor conveyance to the outside, back wall of the subject building. One Fantech Model RN3 Centrifugal Fan was installed in-line with the vent piping, which extends above the

roofline. A u-tube manometer gauge was affixed to the vent piping to provide confirmation that a vacuum is being applied to the sub-slab environment.

To verify the SSDS effectiveness, on April 15, 2020, MAKSolve retested the indoor air by deploying and retrieving a 6-liter Summa® canister at breathing height within the interior crawlspace area of the subject building, using an 8-hour regulator (see Attachment 1, Figure 2). Following the retrieval, the sample (IA-1) was submitted under standard chain-of-custody protocol to ALS Environmental for laboratory analysis of volatile organic compounds (VOCs), per EPA Method TO-15.

Eight VOCs were detected above their respective laboratory reporting limits; however, none, including TCE exceeded their respective Ohio EPA, VAP GIAS Due to Vapor Intrusion for a Commercial/Industrial Land-Use Scenario. TCE was reported at a concentration of 1.56  $\mu$ g/m³, below the standard of 8.8  $\mu$ g/m³.

Site and sample location are illustrated as Figure 1 (Site Location) and Figure 2 (Site Diagram), respectively, provided as Attachment 1. Table 1 is provided as Attachment 2 and summarizes site VOCs detected in sample IA-1, as compared to the initial indoor air results and their respective VAP standards. Sample analytical results are included in the ALS laboratory analytical data report, provided as Attachment 3.

Based on analytical data obtained, it appears that the mitigation system is effective in maintaining the indoor air to Ohio VAP Standards. MAKSolve recommends periodic observation of the SSDS manometer to verify that the system remains operational.

Sincerely, **MAKSolve** 

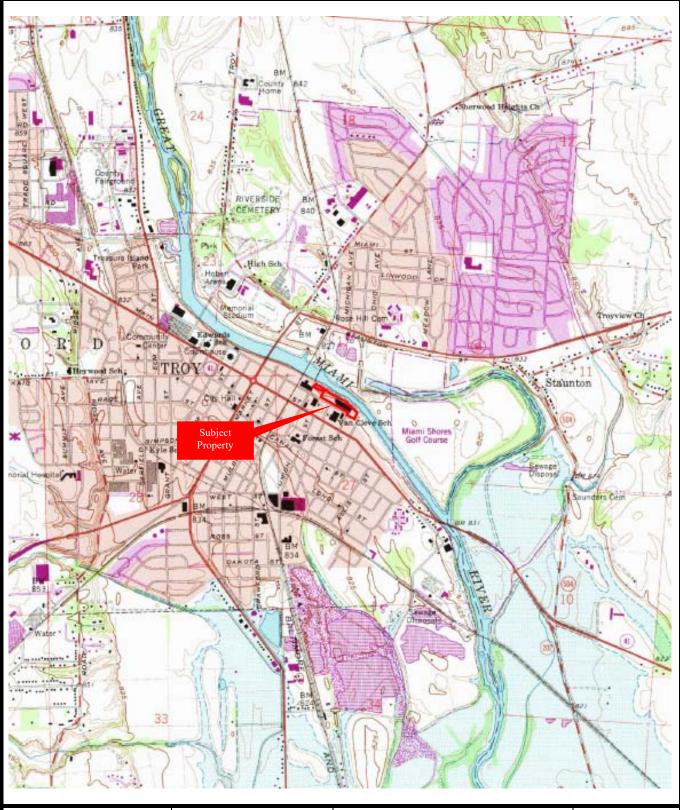
John Bowen

Senior Project Manager

ofm Bowen

# **ATTACHMENT 1**

**FIGURES** 



USGS 1961 NA 028-20	Source	Date	Revision	Project	
	USGS	1961		1 ()/8-/()	

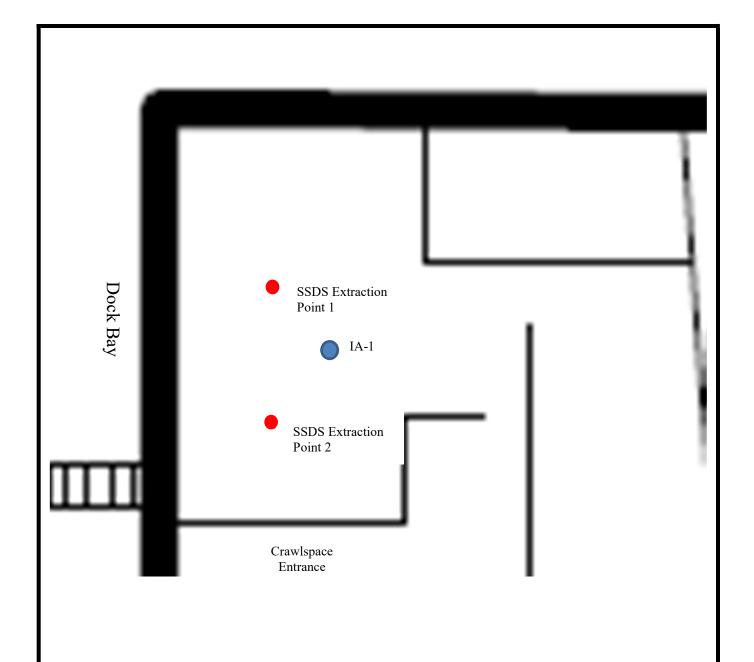
Troy, Ohio 7.5 Minute Topographic Map



Spinnaker Coating 518 East Water Street Troy, Ohio 45373

Figure 1







IA-1 Indoor Air Test Location

Source MAKSolve	Date April 15, 2020	Location  Dock Bay - Crawlspace	Project 028-20			
Fig	gure 2	Site Diagram				
MAK	Solve	Spinnaker Coating 518 East Water Street	W E			

Troy, Miami County, Ohio 45373

# **ATTACHMENT 2**

**TABLE** 

# Table 1 - Indoor Air Sample Results Compared to Ohio EPA Standards Spinnaker Coating 518 East Water Street Troy, OH 45373

Location		IA-1	IA-2	IA-3	IA-4	IA-5	OA-1	IA-1	Generic Indoor Air Standards Due
Sampling Date		11/8/2019	11/8/2019	11/8/2019	11/8/2019	11/8/2019	11/8/2019	4/15/2020	to Vapor Intrusion -
Parameter	Units	Results	commercial/industrial land-use*						
Propylene	μg/m³	3.13	1.15	11	4.37	6.92	ND	ND	NA
Dichlorodifluoromethane	μg/m³	2.38	2.56	2.45	2.82	2.41	2.32	2.97	NA
Chloromethane	μg/m³	0.721	0.816	0.822	0.795	0.776	0.805	ND	390
Ethyl Alcohol	μg/m³	11.6	14.3	17.8	20	17.3	14.2	NR	NA
Acetone	μg/m³	13	9.67	28.5	14.3	231	7.63	30.4	140000
Trichlorofluoromethane	$\mu g/m^3$	1.38	1.33	1.8	2.5	1.81	1.42	ND	3100
2-Butanone	μg/m³	ND	ND	ND	ND	ND	ND	4.54	22000
Iso-Propyl Alcohol	μg/m³	1.49	1.26	33.9	4.69	15.9	7.55	6.51	NA
n-Hexane	μg/m³	ND	ND	1.09	2.05	0.768	ND	ND	3100
1,1,1-Trichloroethane	μg/m³	21.2	ND	ND	ND	ND	ND	ND	22000
Cyclohexane	μg/m³	ND	ND	ND	ND	0.802	ND	ND	26000
Xylene (Total)	μg/m³	ND	ND	14.9	6.43	5	ND	ND	440
Trichloroethene	μg/m³	301	ND	1.4	1.07	4.6	ND	1.56	8.8
Heptane	μg/m³	1.5	ND	0.897	0.82	1.43	ND	ND	NA
Toluene	μg/m³	2.98	1.44	5.95	4.18	4.71	1.05	13.9	22000
Tetrachloroethene	μg/m³	13.7	15.7	58	146	25.7	5.55	ND	180
Tetrahydrofuran	μg/m³	ND	ND	ND	ND	ND	ND	16.1	8800
Ethylbenzene	μg/m³	ND	ND	1.61	1.29	ND	ND	ND	49
p/m-Xylene	μg/m³	ND	ND	7.34	4.78	3.24	ND	ND	440
o-Xylene	μg/m³	ND	ND	7.56	1.63	1.75	ND	ND	440
4-Ethyltoluene	μg/m³	ND	ND	38	2.05	5.46	1.25	ND	NA
1,3,5-Trimethylbenzene	μg/m³	ND	ND	45	2.31	6.1	1.54	ND	NA
1,2,4-Trimethylbenzene	μg/m³	2.62	1.29	140	8.01	19.4	5.21	4.77	31

μg/m<sup>3-</sup> micrograms per cubic meter

ND - non-detect

NR - not reported

Bold and Shaded indicates an exceedance to the standard

Shaded to show results from November 2019 Indoor Air Assessment

<sup>\*</sup> Ohio Environmental Protection Agency Voluntary Action Program

# ATTACHMENT 3 LABORATORY ANALYTICAL RESULTS

# Air Canister - Chain of Custody Record / Analytical Service Request

Page of
---------

ALS Project No.



Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336

Requested Turnaround Time in Business Days (Surcharges) please circle

02818

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ALS) Phone: (513) 733 Fax: (513) 733	-5347		Į.	1 Day (100%) 2 Day	(13%) 3 Day (30%	,, + Duj (0070) C			OH VAP:	∕es ○ No	
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Dayton OH 454 Tolect Mahager John Bowen hone	Fax			020,50						IA = Indoor Air SG = Soil Gas	Comments / Specific Instructions (ie: water or pressure issues)
513-383-0233					74.					0 = Other	omn ructi pres
mail Address for Result Reporting				Sampler (Print & Sign)	Apri	a Mathan	and 1		15	AA = Ambient Air	Co nstr
john amaksolve.	om			Clava ITTO	my Centre	canisted	caqister			SVF = Soil	=
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID	Flow Controller ID	Start Pressure "Hg	End Pressure Hg/psig	PID	F	Vapor Extract	
1A-1		4-15-20	1612	101814	109049	30	6			1-A	
1A-2		4-15-20		119822	109464	30	6		$\times$	IA	
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Relinquished by: (Signature)	-		Date:	Time:	Tracerved by, (orgi						Temperature°C



24-Apr-2020

John Bowen MAKSolve, LLC 261 Regency Ridge Dayton, OH 45459

Tel: (513) 383-0233 Fax: (937) 660-6845

Re: Spinnaker Coating; PN.: 028-20 Work Order: 2004469

Dear John,

ALS Environmental received 2 samples on 17-Apr-2020 09:33 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 18.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Lab Nieman
Electronically approved by: Danielle Strasinger

Rob Nieman

**Project Manager** 

ALS Environmental

Date: 24-Apr-20

Client: MAKSolve, LLC

Project: Spinnaker Coating; PN.: 028-20 Work Order Sample Summary

Work Order: 2004469

Lab Samp II	Client Sample ID	<b>Matrix</b>	Tag Number	<b>Collection Date</b>	<b>Date Received</b>	<u>Hold</u>
2004469-01	IA-1	Air		4/15/2020	4/17/2020 09:33	
2004469-02	IA-2	Air		4/15/2020	4/17/2020 09:33	

ALS Environmental

Date: 24-Apr-20

Client: MAKSolve, LLC

Project: Spinnaker Coating; PN.: 028-20 Case Narrative

**Work Order:** 2004469

The analyses requested were analyzed according to Ohio Voluntary Action Program requirements. Affidavits are available upon request.

The analytical data provided relates directly to the samples received by ALS Laboratory Group and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

Client: MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20 **Work Order:** 2004469

**Sample ID:** IA-1 **Lab ID:** 2004469-01

**Date:** 24-Apr-20

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Repo Qual Lim		Dilution Factor	Date Analyzed
TO-15 BY GC/MS		ETC	)-15		Analyst: MRJ
1,1,1-Trichloroethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,1,2,2-Tetrachloroethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,1,2-Trichloroethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,1-Dichloroethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,1-Dichloroethene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,2,4-Trichlorobenzene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,2,4-Trimethylbenzene	0.97	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,2-Dibromoethane	ND	0.2	0 ppbv	1	4/22/2020 12:49 AM
1,2-Dichlorobenzene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,2-Dichloroethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,2-Dichloropropane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,3,5-Trimethylbenzene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,3-Butadiene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
1,3-Dichlorobenzene	ND	1.	0 ppbv	1	4/22/2020 12:49 AM
1,4-Dichlorobenzene	ND	1.	0 ppbv	1	4/22/2020 12:49 AM
1,4-Dioxane	ND	1.	0 ppbv	1	4/22/2020 12:49 AM
2-Butanone	1.5	1.	0 ppbv	1	4/22/2020 12:49 AM
2-Hexanone	ND	1.	0 ppbv	1	4/22/2020 12:49 AM
2-Propanol	2.6	1.	0 ppbv	1	4/22/2020 12:49 AM
4-Ethyltoluene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
4-Methyl-2-pentanone	ND	1.	0 ppbv	1	4/22/2020 12:49 AM
Acetone	13	1.	0 ppbv	1	4/22/2020 12:49 AM
Benzene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Benzyl chloride	ND	1.	0 ppbv	1	4/22/2020 12:49 AM
Bromodichloromethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Bromoform	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Bromomethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Carbon disulfide	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Carbon tetrachloride	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Chlorobenzene	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Chloroethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
Chloroform	ND	0.2	0 ppbv	1	4/22/2020 12:49 AM
Chloromethane	ND	0.5	0 ppbv	1	4/22/2020 12:49 AM
cis-1,2-Dichloroethene	ND	0.5		1	4/22/2020 12:49 AM
cis-1,3-Dichloropropene	ND	0.5		1	4/22/2020 12:49 AM
Cumene	ND	0.5	• • •	1	4/22/2020 12:49 AM
Cyclohexane	ND	0.5	• • •	1	4/22/2020 12:49 AM
Dibromochloromethane	ND	0.5	• • •	1	4/22/2020 12:49 AM
Dichlorodifluoromethane	0.60	0.5	• • •	1	4/22/2020 12:49 AM

Client: MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20 **Work Order:** 2004469

**Date:** 24-Apr-20

 Sample ID:
 IA-1
 Lab ID:
 2004469-01

 Collection Date:
 4/15/2020
 Matrix:
 AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Ethylbenzene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Freon 113	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Freon 114	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Heptane	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Hexachlorobutadiene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Hexane	ND		0.50	ppbv	1	4/22/2020 12:49 AM
m,p-Xylene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Methylene chloride	ND		2.0	ppbv	1	4/22/2020 12:49 AM
MTBE	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Naphthalene	ND		0.20	ppbv	1	4/22/2020 12:49 AM
o-Xylene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Propene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Styrene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Tetrachloroethene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Tetrahydrofuran	5.5		0.50	ppbv	1	4/22/2020 12:49 AM
Toluene	3.7		0.50	ppbv	1	4/22/2020 12:49 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
trans-1,3-Dichloropropene	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Trichloroethene	0.29		0.20	ppbv	1	4/22/2020 12:49 AM
Trichlorofluoromethane	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Vinyl acetate	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Vinyl chloride	ND		0.50	ppbv	1	4/22/2020 12:49 AM
Surr: Bromofluorobenzene	105		60-140	%REC	1	4/22/2020 12:49 AM
TO-15 BY GC/MS			ETO-1	5		Analyst: MRJ
1,1,1-Trichloroethane	ND		2.73	µg/m3	1	4/22/2020 12:49 AM
1,1,2,2-Tetrachloroethane	ND		3.43	µg/m3	1	4/22/2020 12:49 AM
1,1,2-Trichloroethane	ND		2.73	µg/m3	1	4/22/2020 12:49 AM
1,1-Dichloroethane	ND		2.02	µg/m3	1	4/22/2020 12:49 AM
1,1-Dichloroethene	ND		1.98	µg/m3	1	4/22/2020 12:49 AM
1,2,4-Trichlorobenzene	ND		3.71	µg/m3	1	4/22/2020 12:49 AM
1,2,4-Trimethylbenzene	4.77		2.46	μg/m3	1	4/22/2020 12:49 AM
1,2-Dibromoethane	ND		1.54	μg/m3	1	4/22/2020 12:49 AM
1,2-Dichlorobenzene	ND		3.01	μg/m3	1	4/22/2020 12:49 AM
1,2-Dichloroethane	ND		2.02	μg/m3	1	4/22/2020 12:49 AM
1,2-Dichloropropane	ND		2.31	μg/m3	1	4/22/2020 12:49 AM
1,3,5-Trimethylbenzene	ND		2.46	μg/m3	1	4/22/2020 12:49 AM
1,3-Butadiene	ND		1.11	μg/m3	1	4/22/2020 12:49 AM
1,3-Dichlorobenzene	ND		6.01	μg/m3	1	4/22/2020 12:49 AM
1,4-Dichlorobenzene	ND		6.01	µg/m3	1	4/22/2020 12:49 AM

Client: MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20
 Work Order: 2004469

 **Sample ID:** IA-1
 Lab ID: 2004469-01

**Date:** 24-Apr-20

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		3.60	μg/m3	1	4/22/2020 12:49 AM
2-Butanone	4.54		2.95	μg/m3	1	4/22/2020 12:49 AM
2-Hexanone	ND		4.10	μg/m3	1	4/22/2020 12:49 AM
2-Propanol	6.51		2.46	μg/m3	1	4/22/2020 12:49 AM
4-Ethyltoluene	ND		2.46	μg/m3	1	4/22/2020 12:49 AM
4-Methyl-2-pentanone	ND		4.10	µg/m3	1	4/22/2020 12:49 AM
Acetone	30.4		2.38	μg/m3	1	4/22/2020 12:49 AM
Benzene	ND		1.60	µg/m3	1	4/22/2020 12:49 AM
Benzyl chloride	ND		5.18	µg/m3	1	4/22/2020 12:49 AM
Bromodichloromethane	ND		3.35	µg/m3	1	4/22/2020 12:49 AM
Bromoform	ND		5.17	µg/m3	1	4/22/2020 12:49 AM
Bromomethane	ND		1.94	µg/m3	1	4/22/2020 12:49 AM
Carbon disulfide	ND		1.56	µg/m3	1	4/22/2020 12:49 AM
Carbon tetrachloride	ND		3.15	µg/m3	1	4/22/2020 12:49 AM
Chlorobenzene	ND		2.30	µg/m3	1	4/22/2020 12:49 AM
Chloroethane	ND		1.32	µg/m3	1	4/22/2020 12:49 AM
Chloroform	ND		0.976	µg/m3	1	4/22/2020 12:49 AM
Chloromethane	ND		1.03	μg/m3	1	4/22/2020 12:49 AM
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	4/22/2020 12:49 AM
cis-1,3-Dichloropropene	ND		2.27	μg/m3	1	4/22/2020 12:49 AM
Cumene	ND		2.46	µg/m3	1	4/22/2020 12:49 AM
Cyclohexane	ND		1.72	μg/m3	1	4/22/2020 12:49 AM
Dibromochloromethane	ND		4.26	μg/m3	1	4/22/2020 12:49 AM
Dichlorodifluoromethane	2.97		2.47	μg/m3	1	4/22/2020 12:49 AM
Ethyl acetate	ND		1.80	µg/m3	1	4/22/2020 12:49 AM
Ethylbenzene	ND		2.17	µg/m3	1	4/22/2020 12:49 AM
Freon 113	ND		3.83	μg/m3	1	4/22/2020 12:49 AM
Freon 114	ND		3.50	μg/m3	1	4/22/2020 12:49 AM
Heptane	ND		2.05	μg/m3	1	4/22/2020 12:49 AM
Hexachlorobutadiene	ND		5.33	μg/m3	1	4/22/2020 12:49 AM
Hexane	ND		1.76	μg/m3	1	4/22/2020 12:49 AM
m,p-Xylene	ND		2.17	μg/m3	1	4/22/2020 12:49 AM
Methylene chloride	ND		7.00	μg/m3	1	4/22/2020 12:49 AM
MTBE	ND		1.80	μg/m3	1	4/22/2020 12:49 AM
Naphthalene	ND		1.05	μg/m3	1	4/22/2020 12:49 AM
o-Xylene	ND		2.17	μg/m3	1	4/22/2020 12:49 AM
Propene	ND		0.861	μg/m3	1	4/22/2020 12:49 AM
Styrene	ND		2.13	μg/m3	1	4/22/2020 12:49 AM
Tetrachloroethene	ND		3.39	μg/m3	1	4/22/2020 12:49 AM
Tetrahydrofuran	16.1		1.47	μg/m3	1	4/22/2020 12:49 AM

**Client:** MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20 **Work Order:** 2004469

**Sample ID:** IA-1 **Lab ID:** 2004469-01

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	13.9		1.88	μg/m3	1	4/22/2020 12:49 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	4/22/2020 12:49 AM
trans-1,3-Dichloropropene	ND		2.27	µg/m3	1	4/22/2020 12:49 AM
Trichloroethene	1.56		1.07	μg/m3	1	4/22/2020 12:49 AM
Trichlorofluoromethane	ND		2.81	µg/m3	1	4/22/2020 12:49 AM
Vinyl acetate	ND		1.76	µg/m3	1	4/22/2020 12:49 AM
Vinyl chloride	ND		1.28	µg/m3	1	4/22/2020 12:49 AM
Surr: Bromofluorobenzene	105		60-140	%REC	1	4/22/2020 12:49 AM

**Date:** 24-Apr-20

Client: MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20
 Work Order: 2004469

 **Sample ID:** IA-2
 Lab ID: 2004469-02

**Date:** 24-Apr-20

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			ETO-15	5		Analyst: MRJ
1,1,1-Trichloroethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,1,2,2-Tetrachloroethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,1,2-Trichloroethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,1-Dichloroethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,1-Dichloroethene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,2,4-Trichlorobenzene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,2,4-Trimethylbenzene	56		20	ppbv	40	4/23/2020 03:02 AM
1,2-Dibromoethane	ND		0.20	ppbv	1	4/22/2020 01:34 AM
1,2-Dichlorobenzene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,2-Dichloroethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,2-Dichloropropane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,3,5-Trimethylbenzene	20		0.50	ppbv	1	4/22/2020 01:34 AM
1,3-Butadiene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
1,3-Dichlorobenzene	ND		1.0	ppbv	1	4/22/2020 01:34 AM
1,4-Dichlorobenzene	ND		1.0	ppbv	1	4/22/2020 01:34 AM
1,4-Dioxane	ND		1.0	ppbv	1	4/22/2020 01:34 AM
2-Butanone	ND		1.0	ppbv	1	4/22/2020 01:34 AM
2-Hexanone	ND		1.0	ppbv	1	4/22/2020 01:34 AM
2-Propanol	59		40	ppbv	40	4/23/2020 03:02 AM
4-Ethyltoluene	17		0.50	ppbv	1	4/22/2020 01:34 AM
4-Methyl-2-pentanone	ND		1.0	ppbv	1	4/22/2020 01:34 AM
Acetone	320		40	ppbv	40	4/23/2020 03:02 AM
Benzene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Benzyl chloride	ND		1.0	ppbv	1	4/22/2020 01:34 AM
Bromodichloromethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Bromoform	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Bromomethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Carbon disulfide	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Carbon tetrachloride	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Chlorobenzene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Chloroethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Chloroform	ND		0.20	ppbv	1	4/22/2020 01:34 AM
Chloromethane	0.67		0.50	ppbv	1	4/22/2020 01:34 AM
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
cis-1,3-Dichloropropene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Cumene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Cyclohexane	3.8		0.50	ppbv	1	4/22/2020 01:34 AM
Dibromochloromethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Dichlorodifluoromethane	0.62		0.50	ppbv	1	4/22/2020 01:34 AM

Client: MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20
 Work Order: 2004469

 **Sample ID:** IA-2
 Lab ID: 2004469-02

**Date:** 24-Apr-20

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Ethylbenzene	1.9		0.50	ppbv	1	4/22/2020 01:34 AM
Freon 113	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Freon 114	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Heptane	14		0.50	ppbv	1	4/22/2020 01:34 AM
Hexachlorobutadiene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Hexane	0.67		0.50	ppbv	1	4/22/2020 01:34 AM
m,p-Xylene	8.8		0.50	ppbv	1	4/22/2020 01:34 AM
Methylene chloride	ND		2.0	ppbv	1	4/22/2020 01:34 AM
MTBE	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Naphthalene	ND		0.20	ppbv	1	4/22/2020 01:34 AM
o-Xylene	5.5		0.50	ppbv	1	4/22/2020 01:34 AM
Propene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Styrene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Tetrachloroethene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Tetrahydrofuran	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Toluene	5.2		0.50	ppbv	1	4/22/2020 01:34 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
trans-1,3-Dichloropropene	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Trichloroethene	ND		0.20	ppbv	1	4/22/2020 01:34 AM
Trichlorofluoromethane	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Vinyl acetate	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Vinyl chloride	ND		0.50	ppbv	1	4/22/2020 01:34 AM
Surr: Bromofluorobenzene	102		60-140	%REC	1	4/22/2020 01:34 AM
TO-15 BY GC/MS			ETO-15	<b>;</b>		Analyst: MRJ
1,1,1-Trichloroethane	ND		2.73	μg/m3	1	4/22/2020 01:34 AM
1,1,2,2-Tetrachloroethane	ND		3.43	μg/m3	1	4/22/2020 01:34 AM
1,1,2-Trichloroethane	ND		2.73	μg/m3	1	4/22/2020 01:34 AM
1,1-Dichloroethane	ND		2.02	μg/m3	1	4/22/2020 01:34 AM
1,1-Dichloroethene	ND		1.98	μg/m3	1	4/22/2020 01:34 AM
1,2,4-Trichlorobenzene	ND		3.71	μg/m3	1	4/22/2020 01:34 AM
1,2,4-Trimethylbenzene	273		98.3	μg/m3	40	4/23/2020 03:02 AM
1,2-Dibromoethane	ND		1.54	μg/m3	1	4/22/2020 01:34 AM
1,2-Dichlorobenzene	ND		3.01	μg/m3	1	4/22/2020 01:34 AM
1,2-Dichloroethane	ND		2.02	μg/m3	1	4/22/2020 01:34 AM
1,2-Dichloropropane	ND		2.31	μg/m3	1	4/22/2020 01:34 AM
1,3,5-Trimethylbenzene	99.3		2.46	μg/m3	1	4/22/2020 01:34 AM
1,3-Butadiene	ND		1.11	μg/m3	1	4/22/2020 01:34 AM
1,3-Dichlorobenzene	ND		6.01	μg/m3	1	4/22/2020 01:34 AM
1,4-Dichlorobenzene	ND		6.01	μg/m3	1	4/22/2020 01:34 AM

Client: MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20
 Work Order: 2004469

 **Sample ID:** IA-2
 Lab ID: 2004469-02

**Date:** 24-Apr-20

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		3.60	μg/m3	1	4/22/2020 01:34 AM
2-Butanone	ND		2.95	μg/m3	1	4/22/2020 01:34 AM
2-Hexanone	ND		4.10	μg/m3	1	4/22/2020 01:34 AM
2-Propanol	145		98.3	μg/m3	40	4/23/2020 03:02 AM
4-Ethyltoluene	84.4		2.46	μg/m3	1	4/22/2020 01:34 AM
4-Methyl-2-pentanone	ND		4.10	μg/m3	1	4/22/2020 01:34 AM
Acetone	749		95.0	μg/m3	40	4/23/2020 03:02 AM
Benzene	ND		1.60	µg/m3	1	4/22/2020 01:34 AM
Benzyl chloride	ND		5.18	μg/m3	1	4/22/2020 01:34 AM
Bromodichloromethane	ND		3.35	μg/m3	1	4/22/2020 01:34 AM
Bromoform	ND		5.17	µg/m3	1	4/22/2020 01:34 AM
Bromomethane	ND		1.94	µg/m3	1	4/22/2020 01:34 AM
Carbon disulfide	ND		1.56	µg/m3	1	4/22/2020 01:34 AM
Carbon tetrachloride	ND		3.15	µg/m3	1	4/22/2020 01:34 AM
Chlorobenzene	ND		2.30	µg/m3	1	4/22/2020 01:34 AM
Chloroethane	ND		1.32	μg/m3	1	4/22/2020 01:34 AM
Chloroform	ND		0.976	μg/m3	1	4/22/2020 01:34 AM
Chloromethane	1.38		1.03	μg/m3	1	4/22/2020 01:34 AM
cis-1,2-Dichloroethene	ND		1.98	μg/m3	1	4/22/2020 01:34 AM
cis-1,3-Dichloropropene	ND		2.27	μg/m3	1	4/22/2020 01:34 AM
Cumene	ND		2.46	μg/m3	1	4/22/2020 01:34 AM
Cyclohexane	13.2		1.72	μg/m3	1	4/22/2020 01:34 AM
Dibromochloromethane	ND		4.26	μg/m3	1	4/22/2020 01:34 AM
Dichlorodifluoromethane	3.07		2.47	μg/m3	1	4/22/2020 01:34 AM
Ethyl acetate	ND		1.80	μg/m3	1	4/22/2020 01:34 AM
Ethylbenzene	8.25		2.17	μg/m3	1	4/22/2020 01:34 AM
Freon 113	ND		3.83	μg/m3	1	4/22/2020 01:34 AM
Freon 114	ND		3.50	μg/m3	1	4/22/2020 01:34 AM
Heptane	58.0		2.05	μg/m3	1	4/22/2020 01:34 AM
Hexachlorobutadiene	ND		5.33	μg/m3	1	4/22/2020 01:34 AM
Hexane	2.36		1.76	μg/m3	1	4/22/2020 01:34 AM
m,p-Xylene	38.4		2.17	μg/m3	1	4/22/2020 01:34 AM
Methylene chloride	ND		7.00	μg/m3	1	4/22/2020 01:34 AM
MTBE	ND		1.80	μg/m3	1	4/22/2020 01:34 AM
Naphthalene	ND		1.05	μg/m3	1	4/22/2020 01:34 AM
o-Xylene	24.0		2.17	μg/m3	1	4/22/2020 01:34 AM
Propene	ND		0.861	μg/m3	1	4/22/2020 01:34 AM
Styrene	ND		2.13	μg/m3	1	4/22/2020 01:34 AM
Tetrachloroethene	ND		3.39	μg/m3	1	4/22/2020 01:34 AM
Tetrahydrofuran	ND		1.47	μg/m3	1	4/22/2020 01:34 AM

**Client:** MAKSolve, LLC

**Project:** Spinnaker Coating; PN.: 028-20 **Work Order:** 2004469

**Sample ID:** IA-2 **Lab ID:** 2004469-02

Collection Date: 4/15/2020 Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	19.4		1.88	μg/m3	1	4/22/2020 01:34 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	4/22/2020 01:34 AM
trans-1,3-Dichloropropene	ND		2.27	µg/m3	1	4/22/2020 01:34 AM
Trichloroethene	ND		1.07	µg/m3	1	4/22/2020 01:34 AM
Trichlorofluoromethane	ND		2.81	µg/m3	1	4/22/2020 01:34 AM
Vinyl acetate	ND		1.76	µg/m3	1	4/22/2020 01:34 AM
Vinyl chloride	ND		1.28	µg/m3	1	4/22/2020 01:34 AM
Surr: Bromofluorobenzene	102		60-140	%REC	1	4/22/2020 01:34 AM

**Date:** 24-Apr-20

Date: 24-Apr-20 **ALS** Environmental

**Client:** MAKSolve, LLC Work Order: 2004469

Spinnaker Coating; PN.: 028-20 **Project:** 

Batch ID: R176878 Instrument ID VMS3 Method: ETO-15

Batch ID: <b>R176878</b>	Instrument ID VMS3		Metho	d: <b>ETO-15</b>						
mblk Sample ID:	MBLK-R176878	Run ID: VMS3	_200421A		Jnits: <b>ppbv</b> eqNo: <b>22298</b>	89	Analysi Prep Date:	s Date: 4/2	1/2020 03 DF: 1	:53 PM
				SPK Ref		Control	RPD Ref		RPD	
Analyte	Resi	ult PQL	SPK Val	Value	%REC	Limit	Value	%RPD	Limit	Qua
1,1,1-Trichloroethane	N	D 0.50								
1,1,2,2-Tetrachloroethane	N	D 0.50								
1,1,2-Trichloroethane	N	D 0.50								
1,1-Dichloroethane	٨	D 0.50								
1,1-Dichloroethene	N	D 0.50								
1,2,4-Trichlorobenzene	N	D 0.50								
1,2,4-Trimethylbenzene	N	D 0.50								
1,2-Dibromoethane	Ν	D 0.20								
1,2-Dichlorobenzene	N	D 0.50								
1,2-Dichloroethane		D 0.50								
1,2-Dichloropropane	N	D 0.50								
1,3,5-Trimethylbenzene	N	D 0.50								
1,3-Butadiene	N	D 0.50								
1,3-Dichlorobenzene	N	D 1.0								
1,4-Dichlorobenzene	N	D 1.0								
1,4-Dioxane	N	D 1.0								
2-Butanone	N	D 1.0								
2-Hexanone	N	D 1.0								
2-Propanol	Ν	D 1.0								
4-Ethyltoluene	N	D 0.50								
4-Methyl-2-pentanone	Ν	D 1.0								
Acetone	N	D 1.0								
Benzene	N	D 0.50								
Benzyl chloride	N	D 1.0								
Bromodichloromethane	N	D 0.50								
Bromoform		D 0.50								
Bromomethane		D 0.50								
Carbon disulfide		D 0.50								
Carbon tetrachloride		D 0.50								
Chlorobenzene		D 0.50								
Chloroethane		D 0.50								
Chloroform	N	D 0.20								
Chloromethane		D 0.50								
cis-1,2-Dichloroethene		D 0.50								
cis-1,3-Dichloropropene		D 0.50								
Cumene		D 0.50								
Cyclohexane	N	D 0.50								
Dibromochloromethane	N	D 0.50								
Dichlorodifluoromethane		D 0.50								
Ethyl acetate	N	D 0.50								
Ethylbenzene	N	D 0.50								

Note:

See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Client: MAKSolve, LLC QC BATCH REPORT

**Work Order:** 2004469

**Project:** Spinnaker Coating; PN.: 028-20

Batch ID: R176878	Instrument ID VMS3		Method:	ETO-15		
Freon 113	ND	0.50				
Freon 114	ND	0.50				
Heptane	ND	0.50				
Hexachlorobutadiene	ND	0.50				
Hexane	ND	0.50				
m,p-Xylene	ND	0.50				
Methylene chloride	ND	2.0				
MTBE	ND	0.50				
Naphthalene	ND	0.20				
o-Xylene	ND	0.50				
Propene	ND	0.50				
Styrene	ND	0.50				
Tetrachloroethene	ND	0.50				
Tetrahydrofuran	ND	0.50				
Toluene	ND	0.50				
trans-1,2-Dichloroethene	ND	0.50				
trans-1,3-Dichloropropene	ND	0.50				
Trichloroethene	ND	0.20				
Trichlorofluoromethane	ND	0.50				
Vinyl acetate	ND	0.50				
Vinyl chloride	ND	0.50				
Surr: Bromofluorobenze	ne 9.6	0	10	0	96	60-140

Client: MAKSolve, LLC

**Work Order:** 2004469

**Project:** Spinnaker Coating; PN.: 028-20

Batch ID: R176878 Instrument ID VMS3 Method: ETO-15

Ics Sample ID: LCS-R176878 Client ID:		D: <b>VMS3_</b> 2	200421A		iits: <b>ppbv</b> No: <b>22298</b>	888	Analysis Prep Date:	Date: 4/2	1/2020 03 DF: 1	:10 PM
CHOTH ID.	ruii ii	J. VIVIO3_2	2004217	SPK Ref	10. 22230	Control	RPD Ref		RPD	
Analyte	Result	PQL	SPK Val	Value	%REC	Limit	Value	%RPD	Limit	Qual
1,1,1-Trichloroethane	10.67	0.50	10	0	107	58.8-163	C	)		
1,1,2,2-Tetrachloroethane	10.13	0.50	10	0	101	60-140	C	)		
1,1,2-Trichloroethane	9.55	0.50	10	0	95.5	60-140	C	)		
1,1-Dichloroethane	10.54	0.50	10	0	105	60-140	C	)		
1,1-Dichloroethene	11.31	0.50	10	0	113	60-140	C	)		
1,2,4-Trichlorobenzene	8	0.50	10	0	80	49.3-150	C	)		
1,2,4-Trimethylbenzene	10.7	0.50	10	0	107	50.1-162	C	)		
1,2-Dibromoethane	9.18	0.20	10	0	91.8	60-140	C	)		
1,2-Dichlorobenzene	9.66	0.50	10	0	96.6	41.9-141	C	)		
1,2-Dichloroethane	11.4	0.50	10	0	114	60-140	C	)		
1,2-Dichloropropane	9.84	0.50	10	0	98.4	60-140	C	)		
1,3,5-Trimethylbenzene	10.5	0.50	10	0	105	60-140	C	)		
1,3-Butadiene	13.53	0.50	10	0	135	50.6-140	C	)		
1,3-Dichlorobenzene	9.68	1.0	10	0	96.8	60-140	C	)		
1,4-Dichlorobenzene	9.17	1.0	10	0	91.7	55.1-145	C	)		
1,4-Dioxane	10.02	1.0	10	0	100	60-140	C	)		
2-Butanone	10.87	1.0	10	0	109	60-140	C	)		
2-Hexanone	11.36	1.0	10	0	114	56.2-162	C	)		
2-Propanol	12.19	1.0	10	0	122	60-140	C	)		
4-Ethyltoluene	10.86	0.50	10	0	109	60-140	C	)		
4-Methyl-2-pentanone	12.01	1.0	10	0	120	60-140	C	)		
Acetone	12.22	1.0	10	0	122	60-140	C	)		
Benzene	10.11	0.50	10	0	101	60-140	C	)		
Benzyl chloride	10.38	1.0	10	0	104	31.9-174	·	)		
Bromodichloromethane	10.43	0.50	10	0	104	60-140	C	)		
Bromoform	9.49	0.50	10	0	94.9	60-140	C	)		
Bromomethane	13.78	0.50	10	0	138	60-140	C	)		
Carbon disulfide	10.42	0.50	10	0	104	60-140	C	)		
Carbon tetrachloride	10.32	0.50	10	0	103	60-140	C	)		
Chlorobenzene	9.33	0.50	10	0	93.3	60-140	C	)		
Chloroethane	10.74	0.50	10	0	107	60-140	C	)		
Chloroform	10.45	0.20	10	0	104	60-140	C	)		
Chloromethane	12.05	0.50	10	0	120	60-140	C	)		
cis-1,2-Dichloroethene	11.05	0.50	10	0	110	60-140	C	)		
cis-1,3-Dichloropropene	10	0.50	10	0	100	60-140	C	)		
Cumene	10.3	0.50	10	0	103	60-140	C	)		
Cyclohexane	9.94	0.50	10	0	99.4	60-140	C	)		
Dibromochloromethane	9.43	0.50	10	0	94.3	60-140	C	)		
Dichlorodifluoromethane	11.8	0.50	10	0	118	60-140	C	)		
Ethyl acetate	10.54	0.50	10	0	105	60-140	C	)		
Ethylbenzene	10.15	0.50	10	0	102	60-140	C	)		
Freon 113	10.02	0.50	10	0	100	60-140	C	)		

Client: MAKSolve, LLC

**Work Order:** 2004469

**Project:** Spinnaker Coating; PN.: 028-20

# QC BATCH REPORT

Batch ID: R176878	Instrument ID VMS3		Method:	ETO-15			
reon 114	11.18	0.50	10	0	112	60-140	0
leptane	11.56	0.50	10	0	116	60-140	0
lexachlorobutadiene	9.66	0.50	10	0	96.6	60-140	0
lexane	10.95	0.50	10	0	110	60-140	0
n,p-Xylene	20.85	0.50	20	0	104	60-140	0
Methylene chloride	10.67	2.0	10	0	107	60-140	0
MTBE	10.81	0.50	10	0	108	60.8-151	0
laphthalene	8.16	0.20	10	0	81.6	53.1-152	0
-Xylene	10.42	0.50	10	0	104	60-140	0
ropene	13.27	0.50	10	0	133	34.4-139	0
tyrene	10.2	0.50	10	0	102	60-140	0
etrachloroethene	9.08	0.50	10	0	90.8	60-140	0
etrahydrofuran	11.12	0.50	10	0	111	60-140	0
oluene	9.98	0.50	10	0	99.8	60-140	0
ans-1,2-Dichloroethene	10.02	0.50	10	0	100	60-140	0
ans-1,3-Dichloropropene	10.01	0.50	10	0	100	60-140	0
richloroethene	9.76	0.20	10	0	97.6	60-140	0
richlorofluoromethane	11.02	0.50	10	0	110	60-140	0
inyl acetate	11.41	0.50	10	0	114	48.4-145	0
nyl chloride	12.71	0.50	10	0	127	60-140	0
Surr: Bromofluorobenzene	9.98	0	10	0	99.8	60-140	0

The following samples were analyzed in this batch:

2004469-01A 2004469-02A

MAKSolve, LLC QC BATCH REPORT

**Work Order:** 2004469

**Client:** 

**Project:** Spinnaker Coating; PN.: 028-20

Batch ID: R176924 Instrument ID VMS4	Method: ETO-15
--------------------------------------	----------------

mblk Client ID:	Sample ID: MBLK-R176924	Run II	D: <b>VMS4_2</b>	200422A		nits: <b>ppbv</b> ¡No: <b>22306</b>	40	Analysi Prep Date:	s Date: 4/2	<b>2/2020 03</b> : DF: <b>1</b>	22 PM
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimeth	nylbenzene	ND	0.50								
2-Propanol		ND	1.0								
Acetone		ND	1.0								
Surr: Brom	nofluorobenzene	9.49	0	10	0	94.9	60-140		0		

Ics	Sample ID: LCS-R176924				ι	Jnits: <b>ppbv</b>		Analys	is Date: 4/2	2/2020 01:	55 PM
Client ID:		Run II	D: <b>VMS4_</b> 2	200422A	Se	qNo: <b>22306</b>	38	Prep Date:		DF: <b>1</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimeth	nylbenzene	10.15	0.50	10	C	102	50.1-162		0		
2-Propanol		9.5	1.0	10	C	95	60-140		0		
Acetone		10.19	1.0	10	C	102	60-140		0		
Surr: Bron	nofluorobenzene	9.66	0	10	C	96.6	60-140		0		

The following samples were analyzed in this batch:

2004469-02A

Date: 24-Apr-20 **ALS Environmental** 

**Client:** MAKSolve, LLC

**QUALIFIERS, Project:** Spinnaker Coating; PN.: 028-20 ACRONYMS, UNITS

WorkOrder: 2004469

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
В	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
Н	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method
<b>Units Reported</b>	<b>Description</b>

 $\mu g/m3$ 

ppbv

### Sample Receipt Checklist

Client Name: N	MAKSOLVE-DAYTON				Date/Time I	Received:	<u>17-4</u>	Apr-20	<u>09:33</u>	
Work Order: 2	<u>2004469</u>				Received by	y:	<u>SMI</u>	<u>K</u>		
Checklist comple	eted by <u>Jan Wilcox</u> eSignature	17	7-Apr-20 Date	_	Reviewed by:	Rob 7				20-Apr-20 Date
Matrices: Carrier name:	<u>air</u> <u>ALSHN</u>									
Shipping contained	er/cooler in good condition?		Yes	✓	No 🗆	Not P	resent			
Custody seals int	tact on shipping container/coole	r?	Yes		No 🗆	Not P	resent	<b>✓</b>		
Custody seals int	tact on sample bottles?		Yes		No 🗌	Not P	resent	<b>✓</b>		
Chain of custody	present?		Yes	<b>✓</b>	No 🗌					
Chain of custody	signed when relinquished and r	eceived?	Yes	<b>✓</b>	No 🗌					
Chain of custody	agrees with sample labels?		Yes	<b>✓</b>	No 🗌					
Samples in prope	er container/bottle?		Yes	<b>~</b>	No $\square$					
Sample containe	rs intact?		Yes	<b>✓</b>	No $\square$					
Sufficient sample	volume for indicated test?		Yes	<b>✓</b>	No 🗆					
All samples recei	ived within holding time?		Yes	<b>✓</b>	No 🗌					
Container/Temp	Blank temperature in complianc	e?	Yes	<b>✓</b>	No 🗌					
Temperature(s)/T	Thermometer(s):									
Cooler(s)/Kit(s):										
Water - VOA vials	s have zero headspace?		Yes		No 🗆	No VOA v	vials subr	mitted	✓	
Water - pH accep	otable upon receipt?		Yes		No 🗌	N/A				
pH adjusted? pH adjusted by:			Yes -		No 🗆	N/A				
Login Notes:										
		_ — — — — -					- — — -			 
Client Contacted:	:	Date Contacted:			Person	Contacted	d:			
Contacted By:		Regarding:								
Comments:										
CorrectiveAction:	:									



# DRAFT PHASE II LIMITED SUBSURFACE SOIL INVESTIGATION (PHASE B) REPORT SPINNAKER COATING, LLC EA-6 AND OFFSITE AREAS 518 EAST WATER STREET TROY, MIAMI COUNTY, OHIO 45373

**PROJECT NUMBER: 084-20** 

### PREPARED FOR:

TIMOTHY D. HOFFMAN, PARTNER DINSMORE & SHOHL, LLP FIFTH THIRD CENTER, SUITE 1300 DAYTON, OH 45402

**PREPARED BY:** 

MAKSOLVE 261 REGENCY RIDGE DRIVE DAYTON, OHIO 45459

The Contractor, MAKSolve, hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under contract project number 084-20 is complete, accurate, and complies with all requirements of the contract project.

Date:	<u>September 16, 2020</u>	
Signature(s):	John Bours	Borbara IN Cavern
Name(s):	John Bowen	Barbara A. McGavern
Title(s):	Vice President of Operations	Professional Geologist

### **Table of Contents**

1.0 INTRODUCT	TON	4
1.1 Site	Description	.4
1.2 Site	History	.4
	ceptual Site Model of Subsurface Soil Contamination	
	ted Subsurface Investigation (Phase B)	
	dard of Care	
	itional Scope Limitations	
	ance	
	Quality Objectives	
	ytical Quality ObjectivesIND (PHASE A LSI)	
	VITIES (PHASE B LSI)	
	ity Clearances	
	pe of Work	
	Excavations and Confirmatory Soil Sampling	
	Field Quality Control	
	Summary of Excavation and Confirmation Sampling Activities	
	List of Figures	
Figure 1	Troy, Ohio 7.5-Minute Topographic Map	
Figure 2	Site Map with Phase A LSI Boring/Sample Locations	
Figure 3	Site Map with Phase A LSI TCE and PCE Isoconcentrations	
Figure 4	Phase B LSI Excavation Polygon Soil Areas	
_		
Figure 5	Phase B LSI Excavation Confirmation Soil Sample Locations	
	List of Tables	
Table 1	Phase A LSI Laboratory Sample Analytical Soil Sample TCE and PCE Results	
Table 2	Phase A LSI Laboratory Sample TCLP Analytical Results	
Table 3	Phase B LSI Analytical Soil Samples and Quality Control	
Table 4	Phase B LSI Confirmatory Soil Sample Laboratory Analytical TCE and PCE Results	
Table 4	Finase B LSI Confirmatory Son Sample Laboratory Analytical TCE and FCE Nesurts	
	List of Appendices	
Annondi: A	Phase P. I.C. Field Photograph Log	
Appendix A	Phase B LSI Field Photograph Log	
Appendix B	Phase B LSI Laboratory Analytical Data Reports	
Appendix C	Soil Disposal and Backfill Manifests	

### **List of Acronyms**

bgs below ground surface
COC Chemical of Concern
DPT Direct-Push Technology
DQO Data Quality Objectives

ETCA East Troy Contaminated Aquifer

ft feet

GPR Ground Penetrating Radar HASP Health and Safety Plan

LSI Limited Subsurface Investigation

ID Identification

IDW Investigation-Derived Waste μg/kg micrograms per kilogram

mg/L milligrams per liter

OEPA Ohio Environmental Protection Agency

PCE Perchloroethylene

PID Photo-Ionization Detector
PRG Preliminary Remediation Goal

QC Quality Control

RAO Remedial Action Objective

TCE Trichloroethylene

TCLP Toxicity Characteristic Leaching Procedure
USEPA United States Environmental Protection Agency

USGS United States Geological Survey

VAP Voluntary Action Program
VOC Volatile Organic Compound

WP Work Plan

### 1.0 INTRODUCTION

### 1.1 Site Description

As completion of a Phase II Limited Subsurface Soil Investigation (LSI) for Spinnaker Coating, LLC ("Spinnaker"), subject property, MAKSolve submits this Draft Phase II Limited Subsurface Soil Investigation Phase B Report (Phase B LSI report) for the Exposure Area 6 (EA-6; Site) at Spinnaker. Spinnaker is located at 518 East Water Street in Troy, Miami County, Ohio 45373. An excerpt of the United States Geological Survey (USGS) 7.5-Minute Topographic Map (1961 Troy, Ohio) shows the location of the subject property (Figure 1). MAKSolve completed initial soil sampling at the subject property on March 25<sup>th</sup> and 26<sup>th</sup>, 2020, as a first "phase" (Phase A) of the LSI. The following draft Phase B LSI report details the subsequent work (August 24<sup>th</sup> through September 2<sup>nd</sup>, 2020) that was completed to mitigate the soil contamination identified during Phase A of the LSI.

### 1.2 Site History

As part of the East Troy Contaminated Aquifer (ETCA) Superfund Site, EA-6 is an area of contamination previously identified by the United States Environmental Protection Agency (US EPA) Region 5 as an area requiring environmental action to address present contamination. According to the US EPA, EA-6 was defined as an area located under the asphalt-covered portion of the western parking lot at Spinnaker, was rectangular in shape, and encompassed approximately 3,175 square feet of surface area. The primary chemicals of concern (COCs) identified in subject property soils include trichloroethylene (TCE) and tetrachloroethylene (PCE), COCs for which respective Preliminary Remediation Goals (PRGs) in soils were developed in order to achieve US EPA and Ohio Environmental Protection Agency (Ohio EPA) Remedial Action Objectives (RAOs) for the ETCA. Specifically, US EPA determined the PRGs to be 34 micrograms per kilogram (µg/kg) and 44 µg/kg, respectively, for TCE and PCE in soils. From its investigation and subsequent feasibility study of potential remedial cleanup alternatives for subject property soils, US EPA determined the remedy for EA-6 to be Excavation and Off-site Disposal. However, it was unknown if portions of EA-6 soils may, potentially, be considered hazardous. Additionally, the nature and extent of the potential off-site presence of soil contamination had not been adequately determined.

### 1.3 Conceptual Site Model of Subsurface Soil Contamination

In March 2020, MAKSolve performed the Phase A LSI as an initial assessment of subsurface TCE and PCE contamination at EA-6. A Site map (Figure 2) illustrates the approximate boundaries of the EA-6, as defined by the soil boring/sample locations selected for the Phase A LSI. Based on laboratory analytical results for the soil samples collected from these Phase A locations, subsurface TCE and PCE soil contamination was identified at the subject property, and a

September 16, 2020 Project. No. 084-20

MAKSolve, LLC

conceptual site model (CSM) was developed to illustrate (1) the lateral and vertical extents of TCE and PCE in soils, as well as (2) how the individual TCE and PCE soil concentrations compared to the established, respective PRGs for TCE and PCE (Figure 3).

Phase A LSI analytical soil data suggested that the lateral and vertical extents of soil TCE and PCE contamination appeared to be confined to an area that is approximately half of the original EA-6 footprint, the boundaries, of which, were previously defined by US EPA. The highest concentrations (source area) of TCE and PCE contamination identified in soil at EA-6 proper were located in soils near boring/sample locations MSB-1 and MSB-13 (see Figure 3). However, as depicted, the data model also suggested the potential presence of soil contamination offsite and beyond the boundaries of the EA-6 proper, and at concentrations potentially exceeding the established, respective PRGs. Using these Phase A LSI data, the extent/volume estimate of soils (EA-6 proper) requiring excavation and disposal, as originally defined by US EPA, was revised and decreased from 980 cubic yards (yd³) to 775 yd³. However, when considering the extent and volume of off-site impacted soils, a second revised estimate of approximately 1,500 yd³ was considered.

With respect to total contaminant concentrations, Phase A soil samples collected at EA-6 were also characterized based on their respective analytical toxicity characteristics. The toxicity characteristic leaching procedure (TCLP) analysis of specifically selected samples (those with highest COC total concentrations) showed that subject property soils are not considered hazardous. This information was necessary in planning the excavation and disposal of contaminated soils, subsequently, completed as Phase B of the LSI.

### 1.4 Limited Subsurface Investigation (Phase B)

To address the presence of elevated TCE and PCE concentrations (i.e., concentrations above respective PRGs) identified onsite (EA-6), as well as the potential presence of TCE and PCE in off-site soils, MAKSolve completed the recent Phase B LSI, from August 24<sup>th</sup>, 2020 through September 2<sup>nd</sup>, 2020. The purpose of the Phase B activity was to perform a step-wise excavation of selected areas onsite (EA-6) and offsite, immediately west and north of the original EA-6 footprint. For soils onsite and offsite, the respective area-volume excavation measurements are provided for each individual excavation area, which are depicted as separately colored excavation polygons in Figure 4. Upon reaching the target excavation depth for each excavation polygon, confirmation soil samples were collected (side walls and excavation terminus/floors) and submitted for expedited (24-hour "rush") laboratory soil analysis of TCE and PCE. Confirmation soil sample locations are shown in Figure 5. Daily analytical results of confirmation soil sample analysis helped to "guide" the daily excavation efforts, by verifying that potential concentrations of TCE and/or PCE in remaining soils do not exceed the respective Site PRGs.

September 16, 2020 Project. No. 084-20 As described in the May 14<sup>th</sup>, 2020 Phase II Limited Subsurface Soil Investigation (Phase B) Work Plan (Phase B LSI WP), the focus of the Phase B LSI was to address soils identified and scoped for excavation and disposal, including both (1) soils identified onsite during the Phase A LSI at EA-6 proper, as well as (2) potentially contaminated soils located offsite and immediately adjacent to EA-6, as is suggested by Phase A investigation data and the resultant CSM. Specifically, the goals of the proposed Phase B LSI were to:

- Investigate and define potential off-site PCE and TCE soil contamination to the immediate west and north of EA-6, via organized, step-wise excavation and sampling activities;
- Excavate soil PCE and TCE contamination onsite (EA-6) and offsite (immediately west and north of EA-6) to the estimated lateral and vertical extents suggested by the CSM, and collect and compare confirmation soil sample analytical results against respective PRGs; and
- Transport all contaminated soils identified and excavated, both onsite at EA-6 and at locations identified offsite to the immediate west and north of EA-6, to an approved off-site facility for disposal.

All soil samples collected as part of Phase B activities were submitted to Pace Analytical, an analytical laboratory that is certified with Ohio EPA for analysis of the site COCs. Laboratory analytical results for the Phase B confirmation soil samples were compared to the respective Site PRGs. Section 3.0 of this draft Phase B LSI report provides further detail regarding soil excavation activities and confirmation sampling methodologies and results, subsequent soil disposal and backfill volumes, and subject property restoration work upon completion of the Phase B LSI field effort.

### 1.5 Standard of Care

Environmental services by MAKSolve were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. These services were also performed in accordance with the accepted scope of work, as described in the Phase B LSI WP, and as reflected in the initial project proposal. MAKSolve makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. MAKSolve does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of draft deliverables and final project reports.

### 1.6 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from environmental services performed by MAKSolve are based upon information derived from the on-site activities and other services performed under this scope of work on the dates performed. Site conditions are subject to change over time. Certain indicators of the presence of hazardous substances, petroleum

September 16, 2020 MAKSolve, LLC Project. No. 084-20

products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or may not have been present at the time that MAKSolve performed said services. As such, MAKSolve cannot represent that the subject property contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the Phase II Limited Subsurface Soil Investigation Phase B activity, as well as during previous activities completed to date. Subsurface conditions may vary from those encountered at specific boring/sample locations or during other surveys, tests, assessments, investigations, or exploratory services. Therefore, the data, interpretations, findings, and recommendations presented by MAKSolve are based solely on data obtained at the time of the field activities performed, and are to be considered within the scope of the services presented.

### 1.7 Reliance

MAKSolve understands that the subject property is to be transferred and potentially redeveloped in a commercial and/or residential capacity. Previous investigation activities, data and conclusions, and the LSI Phase B work presented in this report have been prepared for the exclusive use of Dinsmore & Shohl, LLP, on behalf of Spinnaker, as the end user of this information. Any other authorization of use, or reliance by, any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Dinsmore & Shohl, LLP, on behalf of Spinnaker, and MAKSolve. MAKSolve reserves that, for each of our clients, any unauthorized distribution or reuse of MAKSolve-produced documents and materials is at the sole risk of said client. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, report, and any terms and conditions stated by MAKSolve. The limitation of liability defined in the terms and conditions is the aggregate limit of MAKSolve's liability to the client and all relying parties, unless otherwise agreed in writing.

### 1.8 Data Quality Objectives

Data Quality Objectives (DQOs) are goals for the quality of data needed to satisfy the objective of the project. DQO goals define the most appropriate type of data to collect, the appropriate conditions for data collection, and specify the quantity and quality of data needed for decision making. DQOs depend on the end use of the data that will be generated by the project activities. Data from soil sampling activities performed during the Phase B LSI have been gathered with the objective of evaluating the risk to human health and the environment due to the potential presence of identified COCs, TCE and PCE in Site soils. MAKSolve contracted with Pace Analytical to require a Level IV DQO analytical package for the soil samples collected onsite and offsite during the Phase B LSI activity. A Level IV analytical data package is a comprehensive report that allows a data validator to evaluate analytical data and determine its usability, including analytical data results, quality control, and sample handling information. These data quality standards help provide a data validator definitive guidance in areas such as

September 16, 2020 MAKSolve, LLC

blanks, calibration standards, and instrument performance checks, and aid the reviewer in making subjective judgements regarding the use of data that is potentially affected by site conditions. Specific sampling and analysis activities are described below in Section 3.0.

### 1.9 Analytical Quality Objectives

Although the LSI is not being conducted under the Ohio EPA Voluntary Action Program (VAP), MAKSolve has contracted with a VAP-certified analytical laboratory (i.e., Pace Analytical) in order to meet certain analytical quality objectives. Analytical quality objectives are also established to ensure that the laboratory analyses will achieve laboratory detection limits equal to, or more stringent than, most environmental standards used in environmental assessments.

### 2.0 BACKGROUND (PHASE A LSI)

On March 25<sup>th</sup> and 26<sup>th</sup>, 2020, MAKSolve completed an initial subsurface soil investigation (Phase A LSI) of EA-6 at Spinnaker. The work was completed to assess EA-6 contamination previously investigated and identified by US EPA for excavation and off-site disposal and the selected site-specific remedy for cleanup. As such, and in accordance with the selected US EPA cleanup remedy, data from the LSI Phase A were used to evaluate the lateral and vertical extents of total volatile organic compound (VOC) concentrations in subsurface soils beneath the EA-6 boundaries and immediately beyond.

MAKSolve subcontracted FORE Testing/Drilling, Inc. to advance 26 soil borings across the property, during March 25 and 26, 2020. Each soil boring was advanced with a truck-mounted Geoprobe™ drilling rig and associated tooling using direct-push technology (DPT). This technology relies on the weight of the drilling rig and a pneumatic hammer to drive or push a decontaminated stainless-steel split spoon into the soil. The spoon is approximately 1.5 inches (outer diameter) by 36 inches long. When drilling through more resistant materials, the pneumatic hammer was frequently used to assists in penetration and retrieval of soil. Drilling and soil sample collection proceeded to specific, pre-determined depths, based on the hydrogeological data collected during previous investigation work conducted at the site by US EPA. During the Phase A LSI, refusal near ground surface forced drilling activities to be abandoned at some locations; such locations were offset and restarted in order for drilling to continue and soil sampling completed.

Subsurface soils were continuously collected in 3-foot sections, via the split-spoon sampler, at each boring location, from ground surface to depths ranging from approximately 10 feet to 18 feet below ground surface (bgs). Soil sample intervals were retrieved via a 3-foot-long stainless steel sampler, equipped with a new/dedicated 3-foot-long inner, acetate sample liner for each retrieved soil sample interval. Upon retrieval, soil samples were logged (lithologic and geologic

September 16, 2020 MAKSolve, LLC Project. No. 084-20

description) at 2-foot intervals by a MAKSolve geologist and field screened for VOCs using a photoionization detector (PID), equipped with a 10.6-eV lamp. Two soil samples per boring location were submitted for analysis, with each sample selected from the depth intervals that exhibited the highest VOC concentrations, based on the recorded field PID readings. The soil samples were collected and placed into the appropriate laboratory-provided glass sample containers. If insufficient soil volume was recovered for sample target interval (i.e., soil depth interval exhibiting the highest field PID readings), two soil depth intervals from the overall soil boring were combined to provide a "composite" sample: soils from the sample target interval were combined with soils from a depth interval exhibiting the second-highest field PID readings.

Each soil sample consisted of two unpreserved, 4-ounce glass jars, two unpreserved and three pre-preserved 40-milliliter glass vials. Soil collected and containerized in each 40-milliliter glass vial consisted of 5-gram aliquots and were collected in general accordance with US EPA Method 5035. All 52 Site soil samples were stored on ice inside of a dedicated field sample cooler, and maintained at 4°C until final submittal to ALS Analytical Laboratory in Cincinnati, Ohio for laboratory analysis of soil VOCs via Test Method 8260. A Chain of Custody was maintained throughout the soil sampling investigation, from collection to laboratory submittal.

Among the 26 LSI soil borings advanced across the subject property, MAKSolve achieved an approximate coverage area that is comparable to the original EA-6 footprint, as originally defined by US EPA. From this comparative evaluation, MAKSolve was able to refine the estimated total volume of contaminated soils required for removal, and to evaluate the percentage of such soils that would be defined as "hazardous waste." All boring logs are provided in Appendix B of the May 14<sup>th</sup>, 2020 Phase B LSI WP and include geological descriptions and other field data for each of the 26 soil borings that were advanced at EA-6 during the Phase A LSI.

A total of 52 in-situ subsurface soil samples were collected from among the 26 soil boring locations and were submitted for laboratory analysis of soil VOCs. Laboratory analysis indicated the presence of VOCs among the 52 LSI soil samples collected at EA-6. As part of the Phase A LSI, soil analytical data were compared and evaluated with respect to the PRGs that have been determined by USEPA (Table 1). As stated previously, for TCE and PCE concentrations in soil, US EPA determined the PRGs to be 34  $\mu$ g/kg and 44  $\mu$ g/kg, respectively. In particular, soil samples collected during the Phase A LSI showed TCE and PCE present at concentrations that exceed respective laboratory method detection limits (27 samples) and/or respective PRGs (25 samples). Of the 25 samples with constituent PCE and/or TCE concentrations exceeding the respective PRGs, 14 of those 25 samples were submitted for additional VOC laboratory analysis utilizing the TCLP. The samples selected were generally those reporting the highest total PCE/TCE concentrations. Of these 14 TCLP samples, sample MSB-1 (2'-4') and sample MSB-12 (2'-4') contained TCE concentrations of 0.17 milligrams per liter (mg/L) and 0.15 mg/L,

September 16, 2020 Project. No. 084-20 respectively (Table 2). However, none of the 14 samples contained TCE or PCE at concentrations that exceeded their respective maximum concentration for the toxicity characteristic, per 40 CFR 261.24, of 0.5 mg/L for TCE and 0.7 mg/L for PCE.

As such, none of the 14 TCLP soil samples were considered to be hazardous waste and were considered representative of Site soils; as such, these data were used to determine that soils excavated from the EA-6 are not to be considered hazardous and may be transported for off-site disposal at an appropriate landfill facility. The complete laboratory soil analytical report for Phase A LSI soil samples is provided as Appendix C in the May 14<sup>th</sup>, 2020 Phase B LSI WP.

To assist in visualizing and defining the extent of TCE and PCE contamination detected in soils during the Phase A LSI, MAKSolve developed a conceptual area, or footprint, of contamination by mapping individual Phase A soil sample PCE and TCE analytical results across the Site (see Figure 3). In general, as part of developing a CSM, isoconcentration lines are extrapolated, which are depicted as contour lines that represent levels of equal concentration of soil contamination. When the extent of contamination is unknown, or can be estimated, isoconcentration lines are drawn as interpolated lines, or "dashed" lines, by convention. The isoconcentration lines shown at the subject property boundaries in Figure 3 were developed and presented as estimates (i.e., dashed lines) of the lateral and vertical extents of soil contamination. These estimated isoconcentrations were drawn through visual interpolation, as based on the point concentrations of soil contamination/data of the samples collected during the Phase A LSI.

From this evaluation and development of the CSM, the area with the highest PCE and TCE concentrations, in what is considered to be the "source" area at the Site, was considered to be located at and immediately surrounding soil boring location MSB-1. Soil PCE and TCE concentrations were identified in samples collected at depths ranging from approximately 2 feet bgs to 8 feet bgs. These findings are comparable to that of the previous investigation, by US EPA, at EA-6.

From these Phase A LSI data, Site TCE and PCE soil contamination was considered to be located, predominantly, in the central and northern portions of the EA-6. The data further suggested that this contamination may also be present offsite, outside the boundaries of the EA-6, specifically, to the west and north. As such, off-site investigation (to the west and north) was proposed (i.e., Phase B of this LSI), in order to define more completely the apparent greater extent of soil TCE and PCE contamination above respective PRGs, as associated with EA-6.

September 16, 2020 MAKSolve, LLC Project. No. 084-20

Page - 10 -

### 3.0 FIELD ACTIVITIES (PHASE B LSI)

### 3.1 Utility Clearances

As with the Phase A LSI, MAKSolve began Phase B LSI activities by contacting the Ohio Utility Protection Service (OUPS) to request identification of underground utilities at the work site. This included both on-site and off-site areas planned for soil excavation work. In addition, a power pole, owned and operated by Dayton Power and Light (DP&L), located within the source area of contamination, was identified for removal prior to the start of any excavation activities. Between July 17<sup>th</sup> and August 10<sup>th</sup>, 2020, MAKSolve and Spinnaker corresponded with Constance Holbert, Senior Design Technician at DP&L, and Mark Winger, DP&L Project Manager for the Troy, Ohio area, to plan to coordinate removal of the power pole in question. The pole was subsequently removed on August 10<sup>th</sup>, 2020, and the Phase B LSI began on August 24<sup>th</sup>, 2020. On completion of Phase B LSI activities, Spinnaker is coordinating with DP&L to reinstall the power pole and associated adjacent power lines that had been dropped to allow the Phase B LSI excavation and soil sampling activities to be completed.

Prior to the start of work, MAKSolve ensured that the appropriate health and safety precautions were assessed. MAKSolve prepared a Site-specific Health and Safety Plan (HASP) and provided it to all on-site participants (Spinnaker, subcontractors, MAKSolve field geologists, etc.) to read and confirm understanding of the Site-specific concerns. In addition, prior to the start of excavation activities each day, MAKSolve ensured that all on-site participants wore the appropriate level of personal protective equipment (PPE) and had a clear understanding of the work activities being performed each day.

### 3.2 Scope of Work

**Excavation Polygons** — Soils were identified, excavated, and sampled based on the CSM of soil contamination developed from the results Phase A LSI (see Figure 3). Designated areas of onsite and off-site soils were distinguished as separate, color-coded excavation polygons and were removed (excavated) in an organized fashion (see Figure 4). Excavation polygon depths between 6 feet and 10 feet were based on model data that showed elevated soil TCE and PCE concentrations at depths ranging from 2 to 8 feet bgs (see Figure 3).

**Excavation Depths** — Phase A subsurface hydrogeological data indicated groundwater (i.e., potentiometric surface or "water table") is present at approximately 8 to 10 feet bgs across the subject property and surrounding areas offsite. As part of the larger ETCA, known groundwater contamination beneath EA-6 and the surrounding vicinity is being addressed separately by US EPA and is not part of this LSI conducted by MAKSolve. As such, to address TCE and PCE contamination in soil media, solely, and avoid the inherent seasonal variability in the

September 16, 2020 MAKSolve, LLC Project. No. 084-20 Phase B Limited Subsurface Soil Investigation Report

potentiometric surface (i.e., vertical fluctuation and potential subsequent creation of a groundwater "smear zone" of contamination in the subsurface) beneath the property, all onsite and off-site soil excavations were completed to a maximum depth of approximately 10 feet bgs.

**Excavation Volumes** — Soils excavation volumes onsite and offsite were estimated and organized according to designated, colored polygons: Blue Polygon A (166 yd³) and B (222 yd³), Brown Polygon (775 yd³), Green Polygon (67 yd³), Yellow Polygon A (98 yd³) and B (43 yd³), and Red Polygon (127 yd³) (see Figure 4). As discussed in Section 1.0, the original volume estimate for EA-6 proper (980 yd³) was decreased to 775 yd³, represented by the Brown Polygon in Figure 4. Recorded excavated and disposed soil volumes are consistent with this original estimate for EA-6. Further, an additional, approximately, 100 yd³ of soil was excavated from across Blue Polygon (A) and (B), to address exceedances in specific confirmation soil samples that were collected. Together, with the original estimated volumes for soil in the on-site portions of Blue Polygons (A) and (B), an additional, approximately, 400 yd³ of soils were excavated. This excavated, approximately, 400 yd³ from on-site and north and northwest of EA-6 proper is supplementary to the excavation of EA-6 proper, and addresses soil contamination potentially present, as suggested by the Phase A conceptual Site model data (see Figure 3). Recorded excavated and disposed soil volumes are consistent with these estimates.

MAKSolve partnered with a local contractor, Disposal Solutions, to complete the soil excavation and proper disposal for the EA-6 and offsite areas. A MAKSolve geologist oversaw the removal/excavation and confirmatory soil sampling. All excavated on-site and off-site soils were transported by Disposal Solutions for disposal offsite at the St. Paris Landfill in Richmond, Indiana, an approved landfill disposal facility. Excavation of on-site and off-site excavation polygons were completed to the lateral and vertical extents, as directed and determined (i.e., comparison to respective Site PRGs) by the concurrent confirmatory soil samples collected from each excavation polygon (side walls and terminal depth/floor). Each excavation polygon area was subsequently backfilled with aggregate limestone, finished to grade, and restored to the conditions that existed prior to the Phase B LSI, at each respective location.

Excavation Progress, Sampling, and Preliminary Analytical Data — Throughout soil excavation activities, a MAKSolve geologist monitored the progress of each excavation, including excavation depth and dimension. These data helped to ensure the correct target excavation depths were reached, that confirmatory soil samples could be collected, and that the required and sufficient removal of contaminated soils (below PRGs) could be completed. Soil samples were collected and submitted each day via hand delivery (i.e., on-site courier) to Pace Analytical Laboratory, located in Englewood, Ohio, for 24-hour laboratory analysis of soil VOCs using US EPA Method 8260. This time-sensitive analysis provided MAKSolve with preliminary soil analytical results within 24 hours of sample collection and helped to "guide" excavation

September 16, 2020 Project. No. 084-20 activities, laterally and vertically, in the confirmation sampling and removal of impacted soils among the EA-6 and offsite excavation polygon areas. A total of 5 days were required to complete both on-site and off-site excavation activities, including all confirmatory soil sampling and laboratory analysis.

Once the predetermined target depth was reached at each excavation polygon, soil was collected for sample laboratory analysis. All soils for confirmation sampling were retrieved by the excavation contractor, at the direction of the MAKSolve geologist onsite. A "grab" sample of soil was obtained via the on-site excavation machinery, or manually, via a standard shovel. For each sample, the MAKSolve geologist used a separate, new, unpreserved, laboratory-provided glass sample jar to scoop a portion of excavated, untouched soil (i.e., soil that has not touched the surface of the track hoe bucket, or shovel surface) into the sample jar. Because additional sampling equipment was not required (e.g., spoon, pick, or other sampling device), which would require cleaning/decontamination between sample collections, the equipment decontamination procedures, and collection of laboratory equipment blank samples, were not needed/performed.

The MAKSolve geologist also collected a concurrent portion of each collected soil sample (i.e., a duplicate representative aliquot of the same "grab" soil sample), that was retained, sealed within a plastic bag to allow for volatilization, and later field screened with a PID to measure the corresponding concentration of soil VOCs. Throughout the Phase B LSI excavation process, field PID measurements were recorded with each respectively collected confirmation soil sample to help the MAKSolve geologist manage the excavation and, ultimately, to confirm that impacted soils had been removed from each excavation area. All soils utilized for PID screenings were later discarded with the excavated soils for disposal.

Confirmation soil samples were collected and labeled with a sample identification (ID) using specific nomenclature, similar to that presented in the May 14<sup>th</sup>, 2020 Phase B LSI WP (see Table 3). Each confirmation soil sample ID included information specific to the excavation polygon area from which it was collected, the depth at which it was collected, the type of confirmation soil sample (side wall, or excavation bottom/floor), and the sample ID matrix code (primary or QC sample). A total of 42 confirmation soil samples were submitted for laboratory soil analysis per US EPA Method 8260 for VOCs. The soil samples consisted of discrete soils collected from (1) the side walls of each of the excavations and (2) the bottom/centers of each of the excavations. All selected soil samples were submitted to Pace Analytical for laboratory soil VOC analysis. Following collection, all samples were maintained on ice (to 4°C) inside of a dedicated field sample cooler, until final release and submittal to Pace Analytical each day. Separate chains of custody were maintained each day, throughout the Phase B LSI, to track each sample from collection to laboratory submittal, and are available as part of the laboratory analytical data reports provided in Appendix B.

### 3.3 Soil Excavations and Confirmatory Soil Sampling

Phase B LSI excavation and field activities began on August 24<sup>th</sup>, 2020 and were completed on September 2, 2020. On-site and off-site confirmation soil samples were organized and identified according to their respective individual excavation polygon areas (see Figure 5). Excavation activities were conducted in an organized fashion to remove soils, and collect confirmation soil samples, at each designated excavation polygon area, as described below. For convenience, a quick reference table is presented immediately below to show the field location ID (see Figure 5) and corresponding chain-of-custody soil sample ID for each confirmation soil sample that was submitted to Pace Analytical. Each day's activities are documented in the photograph log provided as Appendix A.

Confirmation Sample Field ID	Confirmation Sample Lab ID
1	BLA6WWSS
2	BLA6WNSS
3	BLA6WESS
4	BLA6WSSS
5	BLA6PBSS
6	BLB6WNSS
7	BLB6WESS
8	BLB6WSSS
9	BLB6PBWSS
10	BLB6PBESS
11	BR8WE1SS
12	BR8WE1SD
13	BR8PB1SS
14	BR8WE2SS
15	BR8PB2SS
16	BR8PB3SM
17	BR8PB3SS
18	BR8WSSS
19	YL10WESS
20	YL10WESD
21	YL10PB1SS
22	YL10PB1SM
23	YL10WS1SS
24	YL8WNSS
25	YL10PB2SS
26	YL10PB2SD
27	YL10WS2SS
28	RD8PB1SS
29	RD8WESS

Confirmation Sample Field ID	Confirmation Sample Lab ID
30	RD8PB2SS
31	RD8WSSS
32	RD8WWSS
33	GR6WSSS
34	GR6WWSS
35	GR6PBSS
36	GR6PBSM
Resample 2	082820R2
Resample 6	0825R6
Resample 7	0825R7
Resample 8	0825R8
Resample 9	0825R9
Resample 10	0825R10
Resample 14	082720R14

**BLUE POLYGON EXCAVATION AREAS (A) AND (B)** — Excavation of the Blue Polygon (A) excavation area began at 0815 on August 24<sup>th</sup>, 2020. By 0900, excavation of Blue Polygon (A) to 6 feet bgs was nearly complete. Excavation of the Blue Polygon (B) excavation area was progressing by 0935. Ambient PID monitoring during the excavation work showed measurements of 0.0 parts per million (ppm) VOCs.

Confirmation soil sampling began on August 24<sup>th</sup>, 2020 at 1220 with the collection of the first soil sample at field location #1 (sample ID BLA6WWSS) and the last soil sample at field location #8 (sample ID BLB6WSSS) at 1244. A total of 9 confirmation soil samples were collected for laboratory analysis among Blue Polygons (A) and (B); corresponding PID soil VOC measurements (concentrations and recorded times) are shown below for each field sample location:

Field Location #1: 0.5 ppm at 1335 Field Location #2: 1.0 ppm at 1336 Field Location #3: 0.9 ppm at 1337 Field Location #5: 1.3 ppm at 1338 Field Location #9: 0.7 ppm at 1340 Field Location #6: 0.9 ppm at 1341 Field Location #10: 1.3 ppm at 1342 Field Location #7: 1.8 ppm at 1343 Field Location #8: 1.9 ppm at 1344

The confirmation soil sample for Field Location #4 could not be collected until August 26<sup>th</sup>, 2020, once excavation offsite and adjacent to excavation of the Green Polygon area (discussed below) could begin. The corresponding PID soil VOC measurement (concentration and recorded time) for soil collected from Field Location #4 is shown below:

Field Location #4: 0.8 ppm at 1230 on August 26, 2020

Of the 10 confirmation soil sample locations sampled on August 24<sup>th</sup>, 2020 among Blue Polygons (A) and (B) excavation areas, 6 (Field Location #s 2, 6, 7, 8, 9, and 10) contained TCE and/or PCE at concentrations above the respective PRGs (Table 4). An additional 2 feet of soils were removed (to a total excavation depth of 8 feet bgs) across the bottoms of Blue Polygons (A) and (B), and 5 locations (Field Location #s 6, 7, 8, 9, and 10) of the 6 exceedance sample locations were resampled on August 25<sup>th</sup>, 2020. Field Location #2 would be resampled later, on August 28<sup>th</sup>, 2020, as the location had been covered by soil during excavation activities/progress. With the resampling of each of the six locations, the resultant TCE and/or PCE concentrations were below respective PRGs.

Corresponding PID soil VOC measurements (concentrations and recorded times) are shown below for each resampled Field Location (#s 2, 6, 7, 8, 9, and 10):

Resampled Field Location #2:

Resampled Field Location #6:

Resampled Field Location #7:

Resampled Field Location #7:

Resampled Field Location #8:

Resampled Field Location #8:

Resampled Field Location #9:

Resampled Field Location #10:

0.2 ppm at 1531 on August 25<sup>th</sup>, 2020

0.1 ppm at 1533 on August 25<sup>th</sup>, 2020

0.0 ppm at 1534 on August 25<sup>th</sup>, 2020

0.0 ppm at 1535 on August 25<sup>th</sup>, 2020

It is noted that preliminary analytical results for TCE and PCE in soil collected from Field Location #5 (sample ID BLA6PBSS) were below respective PRGs, at 31.0  $\mu$ g/kg and 29.5  $\mu$ g/kg, respectively (see Table 4), and excavation work was guided based on these data (i.e., no further excavation, as soil TCE and PCE concentrations were satisfactory); however, the final laboratory analytical report shows the final, data-validated soil concentrations of TCE and PCE in soil sample BLA6PBSS to be 37.6  $\mu$ g/kg and 35.8  $\mu$ g/kg, respectively. The TCE exceedance (37.6  $\mu$ g/kg) is not considered significant, but is an exceedance of the respective PRG for TCE (34  $\mu$ g/kg). All final data-validated analytical data reports for the Phase B LSI were completed and provided by Pace Analytical to MAKSolve on September 11<sup>th</sup>, 2020.

**BROWN POLYGON EXCAVATION AREA** — Excavation of the Brown Polygon excavation area was completed on August 24<sup>th</sup>, 2020 to a total depth of 8 feet bgs. By 1400, excavation progress was moving southward toward East Water Street. Confirmation soil sampling began on August 25<sup>th</sup>, 2020 at 0726 with the collection of soil at field location #13 (sample ID BR8PB1SS) and the last soil sample at field location #18 (sample ID BR8WSSS) at 1435. A total of 8 confirmation soil samples were collected for laboratory analysis from the Brown Polygon excavation area on August 25<sup>th</sup>, 2020. Corresponding PID soil VOC measurements (concentrations and recorded times) are shown below for each field sample location:

Field Location #11: 7.4 ppm at 1120 Field Location #12: 8.7 ppm at 1123 Field Location #13: 5.8 ppm at 0920 Field Location #14: 4.8 ppm at 1125 Field Location #15: 6.4 ppm at 1124 Field Location #16: 7.2 ppm at 1451 Field Location #17: 3.3 ppm at 1453 Field Location #18: 2.3 ppm at 1454

Of the 8 confirmation soil sample locations in the Brown Polygon excavation area, only one sample, collected from Field Location #14 (sample ID BR8WE2SS) contained TCE at a concentration above the respective PRG (see Table 4). Additional excavation was performed, subsequently, surrounding Field Location #14, and the location was resampled on August 27, 2020; the resultant TCE concentration was nondetect. The corresponding PID soil VOC measurement (concentration and recorded time) for soil collected from Field Location #14 on August 27<sup>th</sup>, 2020 was 0.0 ppm at 1050.

**GREEN POLYGON EXCAVATION AREA** — The Green Polygon excavation area lies completely within the backyard of the residential property that is located immediately adjacent and west of Spinnaker and EA-6. Excavation of the Green Polygon excavation area began on August 26<sup>th</sup>, 2020, following completion of the portion of the Blue Polygon (A) excavation area that extends offsite and southward into the off-site, immediately adjacent residential property. Excavation was completed to a final depth of 6 feet bgs, and a total of 4 confirmation soil samples were collected from the Green Polygon excavation area on August 26<sup>th</sup>, 2020. The corresponding PID soil VOC measurements (concentrations and recorded times) are shown below for each Green Polygon excavation area field sample location:

Field Location #34: 0.8 ppm at 1231 Field Location #33: 0.7 ppm at 1233 Field Location #35: 0.3 ppm at 1232 Field Location #36: 0.0 ppm at 1234

Field Location #4 (confirmation soil sample ID BLA6WSSS) was identified as a Blue Polygon (A) sample location, but its placement shared a common boundary (side wall) with the Green Polygon excavation area. As such, Field Location #4 was sampled concurrent with Green Polygon excavation area Field Location #8 33, 34, 35, and 36 on August 26<sup>th</sup>, 2020. All 4

September 16, 2020 MAKSolve, LLC Project. No. 084-20 Phase B Limited Subsurface Soil Investigation Report

confirmation soil sample locations in the Green Polygon excavation area were nondetect for TCE and PCE in soil (see Table 4).

**YELLOW POLYGON EXCAVATION AREAS (A) AND (B)** — The Yellow Polygon (A) and (B) excavation areas are located partially onsite, within the EA-6, and partially within the backyard of the residential property that is located immediately adjacent and west of Spinnaker and EA-6. Excavation began on August 26<sup>th</sup>, 2020 and extended through August 27<sup>th</sup>, 2020, reaching a final depth of 10 feet bgs in each of the Yellow Polygon (A) and (B) excavation areas.

A total of 8 confirmation soil samples were collected for laboratory analysis from Yellow Polygon (A) and (B) excavation areas on August 27, 2020. One confirmation sample (Field Location #24; lab sample ID YL8WNSS) was sampled the day prior, on August 26<sup>th</sup>, 2020, as its placement shared a common boundary (side wall) with the Blue Polygon (A) excavation area. As such, Field Location #24 was sampled at midpoint depth of 8 feet bgs and, following the completion of the Green Polygon, Blue Polygon (A), and Yellow Polygon (A) excavation areas.

Corresponding PID soil VOC measurements (concentrations and recorded times) are shown below for each field sample location in the Yellow Polygon (A) and (B) excavation areas:

2.7 ppm at 1321 on August 26<sup>th</sup>, 2020 Field Location #24: 0.0 ppm at 1309 on August 27<sup>th</sup>, 2020 Field Location #19: 0.0 ppm at 1310 on August 27<sup>th</sup>, 2020 Field Location #20: 0.0 ppm at 1310 on August 27<sup>th</sup>, 2020 Field Location #21: 0.0 ppm at 1313 on August 27<sup>th</sup>, 2020 Field Location #22: 0.0 ppm at 1314 on August 27<sup>th</sup>, 2020 Field Location #23: 0.0 ppm at 1311 on August 27<sup>th</sup>, 2020 Field Location #25: 0.0 ppm at 1312 on August 27<sup>th</sup>, 2020 Field Location #26: 0.0 ppm at 1315 on August 27<sup>th</sup>, 2020 Field Location #27:

All 9 confirmation soil sample locations in the Yellow Polygon (A) and (B) excavation areas were nondetect for TCE and PCE in soil (see Table 4).

**RED POLYGON EXCAVATION AREA** — Excavation of the Red Polygon excavation area began on August 27<sup>th</sup>, 2020 and was completed the same day, to a final depth of 8 feet bgs. The Red Polygon excavation area is located offsite and between Spinnaker and the residential property that is located immediately adjacent and west of Spinnaker and EA-6. The entire footprint of the Red Polygon excavation area lies on property owned by the City of Troy. Through discussion and coordination among Spinnaker, MAKSolve, and the City of Troy, an access agreement was established that allowed off-site soil excavation activities to be performed, commensurate with the Phase B LSI excavation onsite at EA-6 and the other, adjacent off-site excavation areas (i.e., Blue Polygon (A), Green Polygon, and Yellow Polygon (A) excavation areas).

September 16, 2020 Project. No. 084-20

A total of 5 confirmation soil samples were collected for laboratory analysis from the Red Polygon excavation area on August 27<sup>th</sup>, 2020. Corresponding PID soil VOC measurements (concentrations and recorded times) are shown below for each field sample location in the Red Polygon excavation area:

0.3 ppm at 1134 on August 27<sup>th</sup>, 2020 Field Location #28: 1.1 ppm at 1135 on August 27<sup>th</sup>, 2020 Field Location #29: 0.6 ppm at 1136 on August 27<sup>th</sup>, 2020 Field Location #30: 0.5 ppm at 1138 on August 27<sup>th</sup>, 2020 Field Location #31: 0.6 ppm at 1137 on August 27<sup>th</sup>, 2020 Field Location #32:

All 5 confirmation soil sample locations in the Red Polygon excavation area were nondetect for TCE and PCE in soil (see Table 4).

## 3.3.1 Field Quality Control

Field quality control (QC) samples were collected at specific frequencies throughout the Phase B LSI in order to document the validity of the generated data. Analysis of QC samples can reveal information about sampling technique, laboratory instrument capability, possible sources of cross contamination, precision of the results, and difficulties with the sample matrix. The following field QC samples are described in detail in see Table 3 and were collected during the Phase B LSI and analyzed by Pace Analytical Laboratory along with the primary confirmation soil samples collected among the five proposed excavation areas:

- Soil Sample Duplicate Soil collected at the same location depth and time as the primary confirmation soil sample.
- Matrix Spike and Matrix Spike Duplicate Soil collected at the same location depth and time as the primary confirmation soil sample. Soil aliquots are collected and separately containerized for the Matrix Spike (MS) sample and the Matrix Spike Duplicate (MSD) sample. Together, the MS and MSD samples are "spiked" in the laboratory with known concentrations of representative analytes of interest (before sample preparation and analysis). This is designed to provide precision and accuracy information about the effect of each sample matrix on the sample preparation and the measurement methodology.

As discussed previously, although "blank" samples were planned, they were not collected during the Phase B LSI field effort, as they were not necessary. Blank samples are intended to validate the decontamination process of sampling equipment in the field; however, because soil samples were collected using the glass sample collection jar, itself, formal sampling equipment/apparatus was not needed and, therefore, no equipment decontamination was performed. The samples originally intended for "blank" collections were, instead, deemed best

September 16, 2020 MAKSolve, LLC Project. No. 084-20

Page - 19 -

used for those Field Locations that required resampling due to exceedances identified in the initial samples (e.g., Field Location #2 sample ID BLA6WNSS on August 24<sup>th</sup>, 2020 exceeded soil TCE and PCE PRGs and, thus, required resampling as sample ID 082820R2 on August 28<sup>th</sup>, 2020).

## 3.3.2 Summary of Excavation and Confirmation Sampling Activities

Of the 1,500 yd<sup>3</sup> (2,250 tons) of soil estimated (onsite and offsite), the total actual volume of soils excavated (onsite and offsite) and disposed was 1,480 yd3 (2,219.32 tons). Upon completion of each "polygon excavation area" (see Figure 4) and confirmation soil sampling, all excavation areas were backfilled with clean, crushed limestone gravel obtained from Barrett Paving Materials in Ludlow Falls, Miami County, Ohio. In the on-site areas (EA-6 and Spinnaker's northern parking lot areas), the backfilled excavations were also topped with a surficial few inches mixture of crushed asphalt and gravel. The additional crushed asphalt component is used to provide increased drainage to the backfilled material. Offsite, in the area of the residential backyard, and in the area of the access road, west and immediately adjacent to EA-6, the excavation areas were also backfilled with the crushed limestone gravel. Of the 1,900 yd<sup>3</sup> (2,565 tons) of backfill estimated (onsite and offsite), the total actual volume of backfill installed was 1,654 yd3 (2,480.29 tons). The truck manifest/logs for both soil excavation/disposal and backfill are provided as Appendix C.

Located between the EA-6 and immediately adjacent access road to the west, the property boundary fenceline was initially removed to facilitate excavation of the areas along the property boundary. Upon completion of the Phase B LSI excavations and sampling, Spinnaker is coordinating the reinstallation of the fenceline, as well as the reinstallation of the DP&L power pole at the corner of the property boundary and fenceline. In addition, and with written (email, August 24<sup>th</sup>, 2020) authorization from the off-site property owner, Robert Lewis, Spinnaker provided for the removal of four large trees that were located offsite and in the areas of the excavations. One tree was located at the corner of the fenceline/property boundary between Spinnaker/EA-6 and the off-site residential property (backyard). Three of the trees were located closer to the residential home and immediately adjacent to the access road that runs from East Water Street, and northward along the property boundary. To facilitate progress of the off-site excavations, a local contractor was retained to remove the trees simultaneous with Phase B LSI activities, so as not to delay excavation and sampling efforts. The remaining tree stumps from the three trees in the vicinity of the access road, and adjacent to the residential home, were ground in place and not removed, due to concern that removal may potentially compromise the foundation/basement of the adjacent residential property/house.

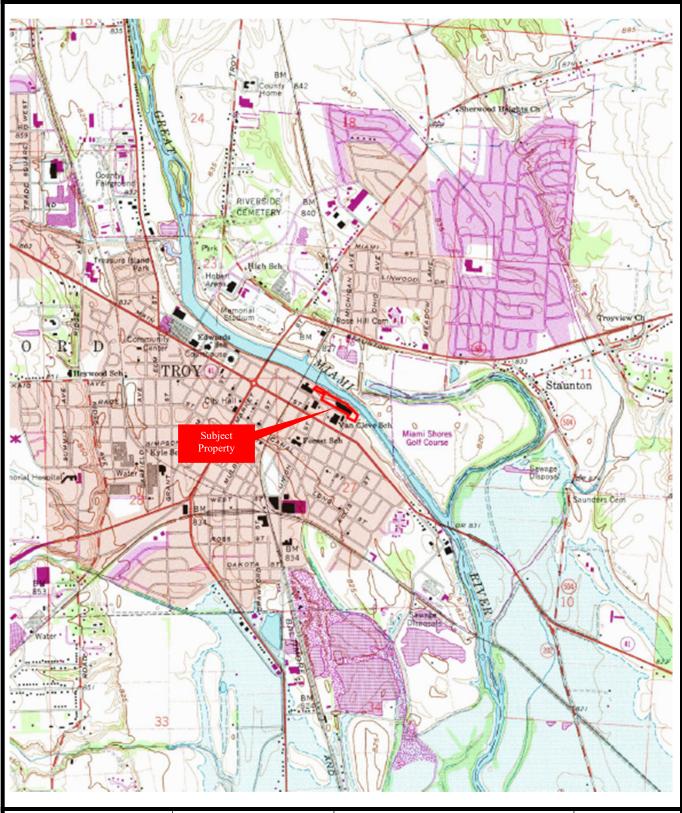
Based on (1) the observations during the on-site and off-site excavations, (2) the confirmation soil sampling and analysis performed across the EA-6 and off-site excavation areas, and (3) the removal (to maximum depths of 6 to 10 feet bgs) of subsurface soils from the source area/EA-6 and surrounding on-site and off-site areas, Spinnaker has addressed the subsurface soil

September 16, 2020 Project. No. 084-20

contamination at EA-6 and, additionally, areas of subsurface soil contamination that were apparent in the off-site vicinity of EA-6. MAKSolve believes that the excavation, sampling, and disposal of these on-site and off-site soils, completed as Phase B of the LSI, satisfies the soil remedial alternative (S-2) originally identified by US EPA for the EA-6 proper.







Source	Date	Revision	Project
USGS	1961	NA	084-20

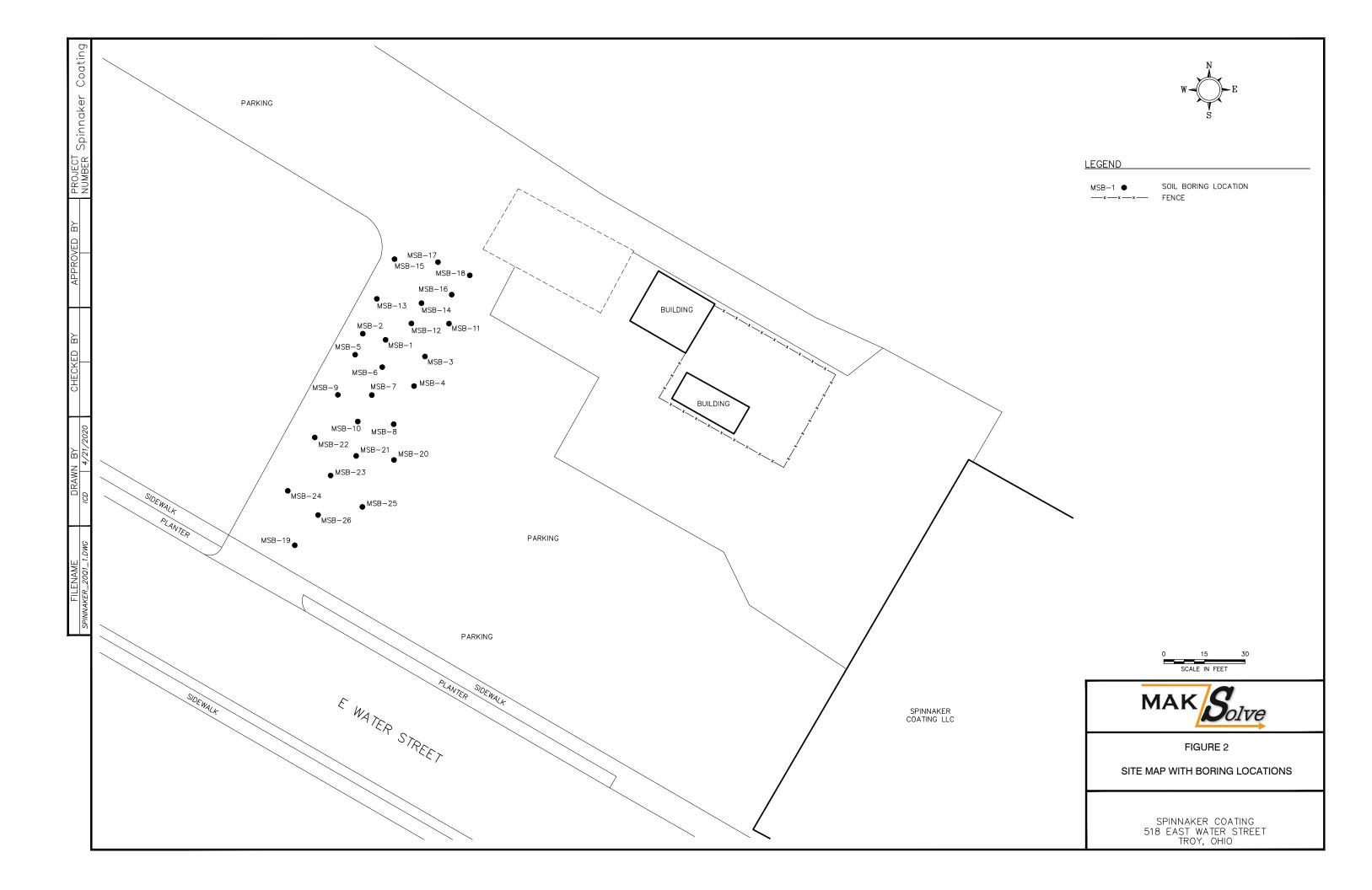
Phase II Limited Subsurface Soil Investigation Phase B Report

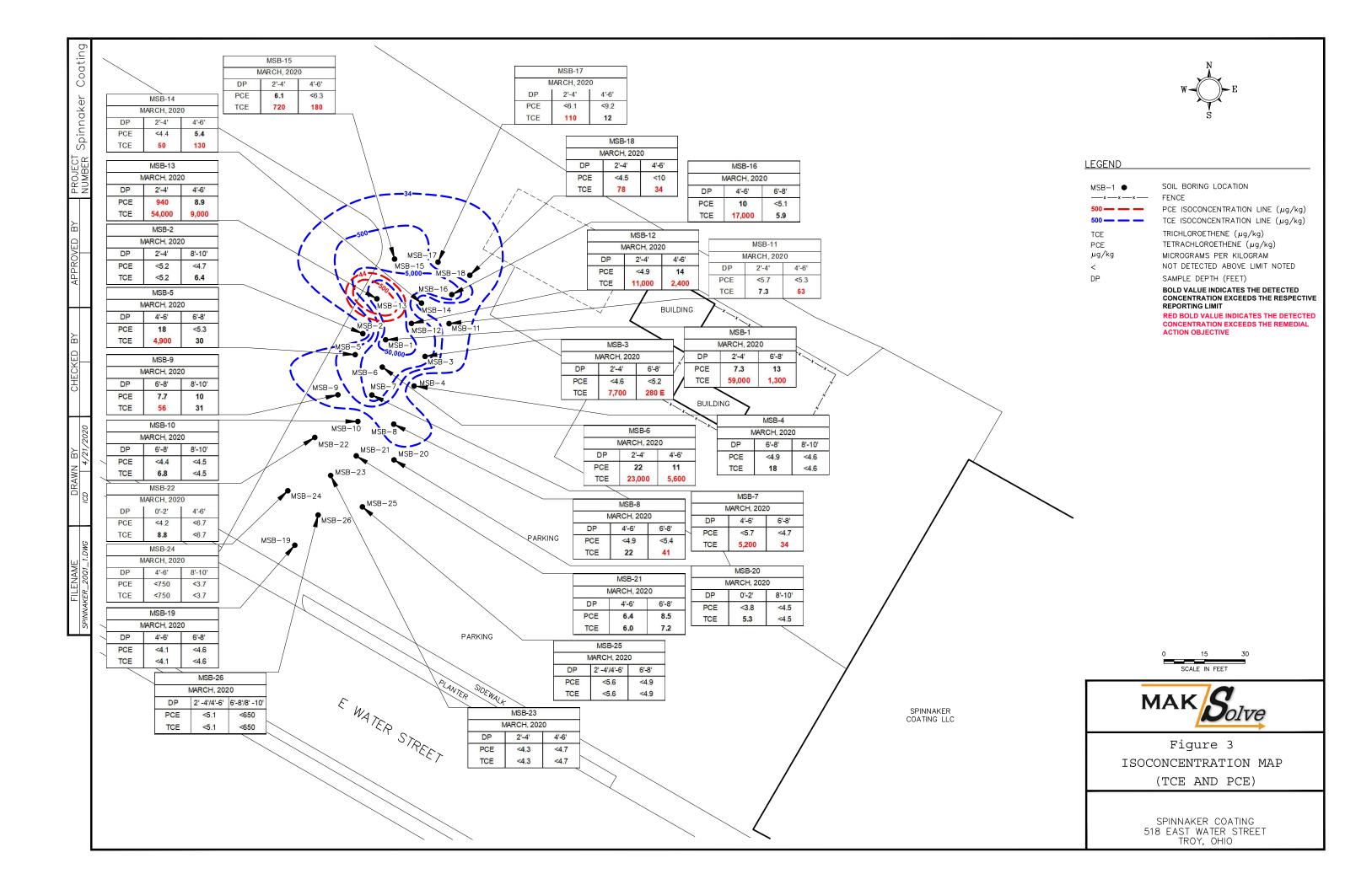
Figure 1
Troy, Ohio 7.5-Minute Topographic Map



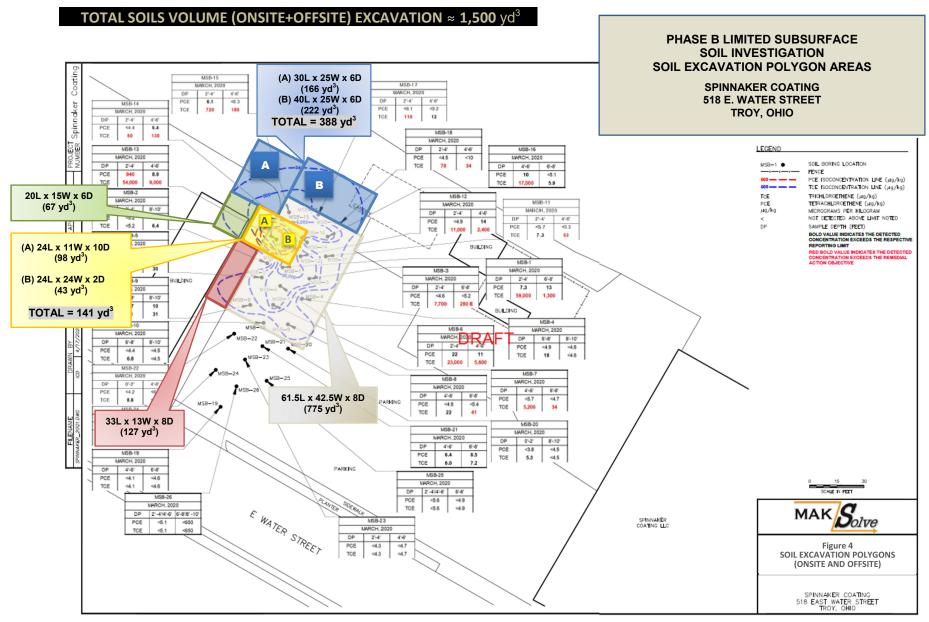
Spinnaker Coating 518 East Water Street Troy, Ohio 45373











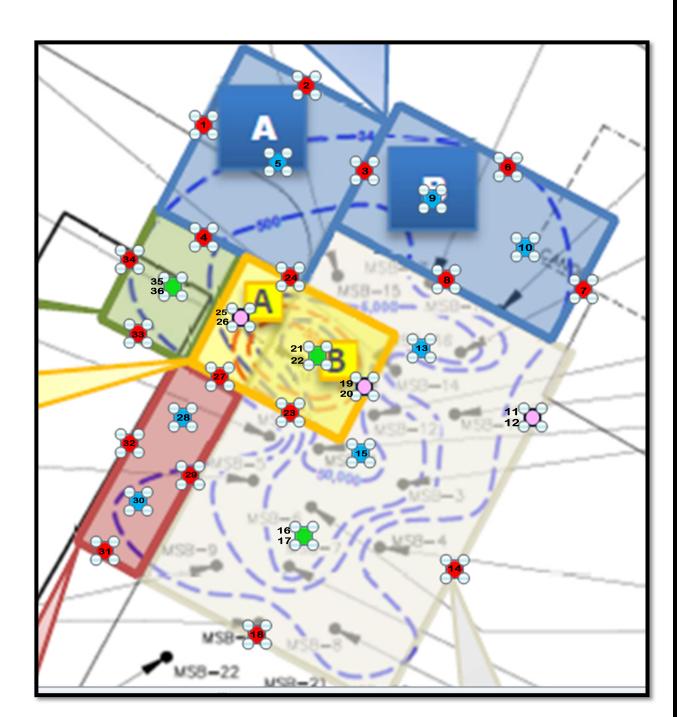
EXCAVATION SOIL SAMPLE TYPE/LOCATION











Phase II Limited Subsurface Soil Investigation Phase B Report

Figure 5
Excavation Polygons and
Associated Confirmation Soil Samples



Spinnaker Coating 518 East Water Street Troy, Ohio 45373





## SOIL SAMPLE ANALYTICAL RESULTS VOLATILE ORGANIC COMPOUNDS

## PHASE A LSI (MARCH 25 AND 26, 2020) EA-6 SPINNAKER COATING TROY, OHIO

	RESULT REMEDIAL SOIL SAMPLE LOCATION AND DEPTH INTERVAL								AL	
ANALYTE	REPORTED TO	ACTION OBJECTIVE	UNITS	MSB-1* (2-4ft)	MSB-1* (6-8ft)	MSB-2 (2-4ft)	MSB-2 (8-10ft)	MSB-3* (2-4ft)	MSB-3 (6-8ft)	MSB-4 (6-8ft)
Tetrachloroethene	RL	44	ug/Kg	7.3	13	<5.2	<4.7	<4.6	<5.2	<4.9
Trichloroethene	RL	34	ug/Kg	59000	1300	<5.2	6.4	7700	280 E	18
	1				l				l	
ANALYTE	RESULT	REMEDIAL	LIMITE			OIL SAMPLE LO				
ANALYTE	REPORTED TO	ACTION OBJECTIVE	UNITS	MSB-4 (8-10ft)	MSB-5* (4-6ft)	MSB-5 (6-8ft)	MSB-6* (2-4ft)	MSB-6 (4-6ft)	MSB-7 (4-6ft)	MSB-7 (6-8ft)
Tetrachloroethene	RL	44	ug/Kg	<4.6	18	<5.3	22	11	<5.7	<4.7
Trichloroethene	RL	34	ug/Kg	<4.6	4900	30	23000	5600	5200	34
	RESULT	REMEDIAL			Si	OIL SAMPLE LO	CATION AND I	DEDTH INTERV	۸۱	
ANALYTE	REPORTED	ACTION	UNITS	MSB-8	MSB-8	MSB-9*	MSB-9	MSB-10	MSB-10	MSB-11
	то	OBJECTIVE		(4-6ft)	(6-8ft)	(6-8ft)	(8-10ft)	(6-8ft)	(8-10ft)	(2-4ft)
Tetrachloroethene	RL	44	ug/Kg	<4.9	<5.4	7.7	10	<4.4	<4.5	<5.7
Trichloroethene	RL	34	ug/Kg	22	41	56	31	6.8	<4.5	7.3
	RESULT	REMEDIAL			SO	OIL SAMPLE LO	CATION AND I	DEPTH INTERV	ΔΙ	_
ANALYTE	REPORTED	ACTION	UNITS	MSB-11	MSB-12*	MSB-12	MSB-13*	MSB-13*	MSB-14	MSB-14*
	то	OBJECTIVE		(4-6ft)	(2-4ft)	(4-6ft)	(2-4ft)	(4-6ft)	(2-4ft)	(4-6ft)
Tetrachloroethene	RL	44	ug/Kg	<5.3	<4.9	14	940	8.9	<4.4	5.4
Trichloroethene	RL	34	ug/Kg	53	11000	2400	54000	9000	50	130
	RESULT	REMEDIAL			SO	OIL SAMPLE LO	CATION AND I	DEPTH INTERV	AL	_
ANALYTE	REPORTED	ACTION	UNITS	MSB-15*	MSB-15	MSB-16*	MSB-16	MSB-17	MSB-17	MSB-18
	ТО	OBJECTIVE	<u> </u> 	(2-4ft)	(4-6ft)	(4-6ft)	(6-8ft)	(2-4ft)	(4-6ft)	(2-4ft)
Tetrachloroethene	RL	44	ug/Kg	6.1	<6.3	10	<5.1	<6.1	<9.2	<4.5
Trichloroethene	RL	34	ug/Kg	720	180	17000	5.9	110	12	78
	RESULT	REMEDIAL			SO	OIL SAMPLE LO	CATION AND I	DEPTH INTERV	AL	_
ANALYTE	REPORTED	ACTION	UNITS	MSB-18	MSB-19	MSB-19	MSB-20	MSB-20	MSB-21	MSB-21
	ТО	OBJECTIVE		(4-6ft)	(4-6ft)	(6-8ft)	(0-2ft)	(8-10ft)	(4-6ft)	(6-8ft)
Tetrachloroethene	RL	44	ug/Kg	<10	<4.1	<4.6	<3.8	<4.5	6.4	8.5
Trichloroethene	RL	34	ug/Kg	34	<4.1	<4.6	5.3	<4.5	6.0	7.2
	RESULT	REMEDIAL			S.	OIL SAMPLE LO	CATION AND I	DEDTH INTERV	A1	_
ANALYTE	REPORTED	ACTION	UNITS	MSB-22	MSB-22	MSB-23	MSB-23	MSB-24	MSB-24	MSB-25
Tetrachloroethene	RL	OBJECTIVE 44	ug/Kg	(0-2ft) <4.2	(4-6ft) <6.7	(2-4ft) <4.3	(4-6ft) <4.7	(4-6ft) <6.0	(8-10ft) <3.7	(2-4/4-6f
Trichloroethene	RL	34	ug/Kg	8.8	<6.7	<4.3	<4.7	<6.0	<3.7	<5.6
	RESULT	REMEDIAL			SOIL SAN	/IPLE LOCATION	N AND DEPTH I	NTERVAL		i
	REPORTED	ACTION	UNITS	MS	B-25	MSI	B-26	MS	B-26	1
ANALYTE	TO	OBJECTIVE			8ft)	(2-4/	4-6ft)	(6-8/8	3-10ft)	
ANALYTE  Tetrachloroethene			ug/Kg	(6-			<b>4-6ft)</b> 5.1	<u> </u>	3- <b>10ft)</b> 5.2	

### Notes:

 $\label{eq:Bolded} \textbf{Bolded} = \textbf{Detected at a concentration that exceeds the respective reporting limit.}$ 

Bolded and Orange = Detected at a concentration exceeding the remedial action objective.

<sup>\* =</sup> See Table 2 for respective Maximum Concentration of Contaminants for the Toxicity Characteristic Leaching Procedure (TCLP)

## **ANALYTICAL SOIL SAMPLES**

# MAXIMUM CONCENTRATIONS OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) PHASE A LIMITED SUBSURFACE INVESTIGATION EA-6 SPINNAKER COATING

T	RO	Y,	ОН	IC

		MAXIMUM REGULATORY		SOIL SAMPLE LOCATION AND DEPTH INTERVAL					
ANALYTE	REPORTING LIMIT	CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE	UNITS	MSB-1* (2-4ft)	MSB-1* (6-8ft)	MSB-3* (2-4ft)	MSB-5* (4-6ft)	MSB-6* (2-4ft)	MSB-9* (6-8ft)
Tetrachloroethene 0.10		0.7	mg/L	ND	ND	ND	ND	ND	ND
Trichloroethene 0.10		0.5	mg/L	0.17	ND	ND	ND	ND	ND
		MAXIMUM REGULATORY			SOIL SAM	PLE LOCATION	N AND DEPTH	INTERVAL	
ANALYTE	REPORTING LIMIT	MAXIMUM REGULATORY CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE	UNITS	MSB-12* (2-4ft)	SOIL SAM MSB-13* (2-4ft)	MSB-13* (4-6ft)	MSB-14* (4-6ft)	MSB-15* (2-4ft)	MSB-16* (4-6ft)
ANALYTE  Tetrachloroethene		CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC	<b>UNITS</b>	11102	MSB-13*	MSB-13*	MSB-14*	MSB-15*	

### Notes:

RL = Laboratory Analytical Method Reporting Limit

ND = Not Detected at a concentration that exceeds the respective RL.

Bolded = Detected at a concentration that exceeds the respective RL.

## ANALYTICAL SOIL SAMPLES AND QUALITY CONTROL PHASE B LIMITED SUBSURFACE INVESTIGATION EA-6 AND OFFSITE AREAS SPINNAKER COATING TROY, OHIO

Sample	Sample Identification (ID) Matrix Code	Description and Purpose	Sample Collection Frequency	
Excavation Pit Soil Sample	SS	Total 30 (approx. 4 per day)		
Excavation Pit Soil Sample Duplicate	SD	1 per 10		
MS/MSD	SM	1 per 10		
Field Blanks	FB	1 per 20		
Equipment Blanks	EB	1 per 20		
		Components of Sample ID Nomenclature — Sample ID: XX-##-TT-MM		
Component		Component Description	Example Sample IDs	
хх	Refers to the excavation Onsite and Offsite Areas GY = GRE	YL10PBSS Soil collected from yellow excavation pit, at 10ft bgs, sample collected at		
##	Refers to the depth of ex	pit bottom, is a primary soil sample		
π	Refers to the sample tyl from each step-wide ext be collected from an ext sample; soil collected at according to the followin WB = w	GY06CWSD  Sample collected from grey excavation pit, at 6fi bgs, collected as wall composite sample, and is a duplicate soil sample.		
ММ		Matrix Code, described above in this table and includes both primary confirmation samples and QC samples.  rimary soil sample SD = duplicate soil sample SM = MS/MSD soil sample  equipment blank	GY06CWEB  Equipment blank sample collected following collection of wall composite soil samples from grey excavation pit at 6ft bgs.	

## CONFIRMATORY SOIL SAMPLE LABORATORY ANALYTICAL RESULTS — VOLATILE ORGANIC COMPOUNDS EXCAVATION POLYGONS (ONSITE AND OFFSITE) — PHASE B LSI (AUGUST 24 - SEPTEMBER 2, 2020) SPINNAKER COATING (TROY, OHIO)

	RESULT	REMEDIAL		FIELD ID: #1	FIELD ID: #3	FIELD ID: #3D (Become)	EIELD ID. #3		GON (A) SAMPLE RESULTS				
ANALYTE	REPORTED TO	ACTION OBJECTIVE	UNITS		FIELD ID: #2 SAMPLE ID: BLA6WNSS DATE/TIME: 082420/1223 DEPTH: 6 ft bgs	FIELD ID: #2R (Resample) SAMPLE ID: 082820R2 DATE/TIME: 082820/1003 DEPTH: 8 ft bgs	FIELD ID: #3 SAMPLE ID: BLA6WESS DATE/TIME: 052420/1226 DEPTH: 6 ft bgs	FIELD ID: #4 SAMPLE ID: BLA6WSSS DATE/TIME: 082620/1143 DEPTH: 6 ft bgs	FIELD ID: #5 SAMPLE ID: BLA6PBSS DATE/TIME: 082420/1231 DEPTH: 6 ft bgs				
Trichloroethene	RL	34	ug/Kg	3.4J	217	14.7J	ND	ND	37.6 (31.0)				
Tetrachloroethene	RL	44	ug/Kg	5.5J	55.7	25.1J	ND	ND	35.8 (29.5)				
_				I				BLUE EXCAVATION POLY	GON (B) SAMPLE RESULTS				
ANALYTE	RESULT REPORTED TO	REMEDIAL ACTION OBJECTIVE	UNITS		FIELD ID: #6R (Resample) SAMPLE ID: 0825R6 DATE/TIME: 082520/1507 DEPTH: 8 ft bgs	FIELD ID: #7 SAMPLE ID: BLB6WESS DATE/TIME: 082420/1242 DEPTH: 6 ft bgs	FIELD ID: #7R (Resample) SAMPLE ID: 0825R7 DATE/TIME: 082520/1509 DEPTH: 8 ft bgs	FIELD ID: #8 SAMPLE ID: BLB6WSSS DATE/TIME: 082420/1244 DEPTH: 6 ft bgs	FIELD ID: #8R (Resample) SAMPLE ID: 0825R8 DATE/TIME: 082520/1515 DEPTH: 8 ft bgs	FIELD ID: #9 SAMPLE ID: BLB6PBWSS DATE/TIME: 082420/1234 DEPTH: 6 ft bgs	FIELD ID: #9R (Resample) SAMPLE ID: 0825R9 DATE/TIME: 082520/1517 DEPTH: 8 ft bgs	FIELD ID: #10 SAMPLE ID: BLB6PBESS DATE/TIME: 082420/1240 DEPTH: 6 ft bgs	FIELD ID: #10R (Resample) SAMPLE ID: 0825R10 DATE/TIME: 082520/1520 DEPTH: 8 ft bgs
Trichloroethene	RL	34	ug/Kg	215 (97.4)	4.9J	455 (350)	ND	454 (361)	18.4J	97.2 (72.9)	30.3	138 (102)	15.1J
Tetrachloroethene	RL	44	ug/Kg	122 (172)	19.5J	80.8 (62.1)	7.6J	25.5J (20.2J)	ND	34.5 (25.8)	ND	96.8 (71.5)	19.9J
								BROWN EXCAVATION PO	DLYGON SAMPLE RESULTS				
ANALYTE	RESULT REPORTED TO	REMEDIAL ACTION OBJECTIVE	UNITS	FIELD ID: #11 SAMPLE ID: BR8WE1SS DATE/TIME: 082520/1002 DEPTH: 8 ft bgs	FIELD ID: #12 SAMPLE ID: BR8WE1SD DATE/TIME: 082520/1002 DEPTH: 8 ft bgs	FIELD ID: #13 SAMPLE ID: BR8PB1SS DATE/TIME: 082520/0726 DEPTH: 8 ft bgs	FIELD ID: #14 SAMPLE ID: BR8WE2SS DATE/TIME: 082520/1231 DEPTH: 8 ft bgs	FIELD ID: #14R (Resample) SAMPLE ID: 082720R14 DATE/TIME: 082720/1055 DEPTH: 8 ft bgs	FIELD ID: #15 SAMPLE ID: BR8PB2SS DATE/TIME: 082520/1108 DEPTH: 8 ft bgs	FIELD ID: #16 SAMPLE ID: BR8PB3SM DATE/TIME: 082520/1430 DEPTH: 8 ft bgs	FIELD ID: #17 SAMPLE ID: BR8PB3SS DATE/TIME: 082520/1433 DEPTH: 8 ft bgs	FIELD ID: #18 SAMPLE ID: BR8WSSS DATE/TIME: 082520/1435 DEPTH: 8 ft bgs	
Trichloroethene	RL	34	ug/Kg	5.5J	ND	ND	134 (106)	ND	26.0J	8.4J	8.2J	ND	
Tetrachloroethene	RL	44	ug/Kg	ND	ND	4.0J	ND (ND)	ND	9.6J	ND	ND	ND	
								GREEN EXCAVATION PO	LYGON SAMPLE RESULTS				
ANALYTE	RESULT REPORTED TO	REMEDIAL ACTION OBJECTIVE	UNITS	FIELD ID: #33 SAMPLE ID: GR6WSSS DATE/TIME: 082620/1146 DEPTH: 6 ft bgs	FIELD ID: #34 SAMPLE ID: GR6WWSS DATE/TIME: 082620/1148 DEPTH: 6 ft bgs	FIELD ID: #35 SAMPLE ID: GR6PBSS DATE/TIME: 082620/1149 DEPTH: 6 ft bgs	FIELD ID: #36 SAMPLE ID: GR6PBSM DATE/TIME: 082620/1150 DEPTH: 6 ft bgs						
Trichloroethene	RL	34	ug/Kg	ND	ND	ND	ND						
Tetrachloroethene	RL	44	ug/Kg	ND	ND	ND	ND						
								YELLOW EXCAVATION POL	YGON (A) SAMPLE RESULTS				
ANALYTE	RESULT REPORTED TO	REMEDIAL ACTION OBJECTIVE	UNITS	FIELD ID: #24 SAMPLE ID: YL8WNSS DATE/TIME: 082620/1300 DEPTH: 8 ft bgs	FIELD ID: #25 SAMPLE ID: YL10PB2SS DATE/TIME: 082720/1234 DEPTH: 10 ft bgs	FIELD ID: #26 SAMPLE ID: YL10PB2SD DATE/TIME: 082720/1235 DEPTH: 10 ft bgs	FIELD ID: #27 SAMPLE ID: YL10WS2SS DATE/TIME: 082720/1236 DEPTH: 10 ft bgs						
Trichloroethene	RL	34	ug/Kg	16.4J	4.2J	ND	ND						
Tetrachloroethene	RL	44	ug/Kg	ND	ND	ND	ND						
								YELLOW EXCAVATION POL	YGON (B) SAMPLE RESULTS				
ANALYTE	RESULT REPORTED TO	REMEDIAL ACTION OBJECTIVE	UNITS	FIELD ID: #19 SAMPLE ID: YL10WESS DATE/TIME: 082720/1230 DEPTH: 10 ft bgs	FIELD ID: #20 SAMPLE ID: YL10WESD DATE/TIME: 082720/1231 DEPTH: 10 ft bgs	FIELD ID: #21 SAMPLE ID: YL10PB1SS DATE/TIME: 082720/1232 DEPTH: 10 ft bgs	FIELD ID: #22 SAMPLE ID: YL10PB1SM DATE/TIME: 082720/1233 DEPTH: 10 ft bgs	FIELD ID: #23 SAMPLE ID: YL10WS1SS DATE/TIME: 082720/1237 DEPTH: 10 ft bgs	, ,				
Trichloroethene	RL	34	ug/Kg	4.9J	ND	3.6J	ND	ND					
Tetrachloroethene	RL	44	ug/Kg	11.0J	ND	ND	ND	ND					
								RED EXCAVATION POL	YGON SAMPLE RESULTS				
ANALYTE	RESULT REPORTED TO	REMEDIAL ACTION OBJECTIVE	UNITS	FIELD ID: #28 SAMPLE ID: RD8PB1SS DATE/TIME: 082720/1115 DEPTH: 8 ft bgs	FIELD ID: #29 SAMPLE ID: RD8WESS DATE/TIME: 082720/1119 DEPTH: 8 ft bgs	FIELD ID: #30 SAMPLE ID: RD8PB2SS DATE/TIME: 082720/1117 DEPTH: 8 ft bgs	FIELD ID: #31 SAMPLE ID: RD8WSSS DATE/TIME: 082720/1125 DEPTH: 8 ft bgs	FIELD ID: #32 SAMPLE ID: RD8WWSS DATE/TIME: 082720/1122 DEPTH: 8 ft bgs					
Trichloroethene	RL	34	ug/Kg	ND	31.8	ND	ND	ND					
Tetrachloroethene	RL	44	ug/Kg	ND	3.3J	ND	21.3J	ND					
Notes:									tion that exceeds the respective re				

Bolded = Detected at a concentration that exceeds the respective reporting limit

Bolded and Orange = Detected at a concentration exceeding the respective remedial action objective; this exceedance triggered subsequent resampling of the location.

Purple = Preliminary laboratory analytical results indicated sample concentration was below the respective remedial action objective; thus, subsequent resampling was not performed. Final laboratory analytical sample result is shown with the Preliminary laboratory analytical sample result in parenthesis "()".

Notes:

R1 = Reporting Limit; the lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

ND = Not Detected at or above adjusted reporting limit.

bgs = Below Ground Surface

## **APPENDIX A**

Phase B LSI Field Photograph Log

Project name: SPINNAKER COATING PHASE B LSI SOIL EXCAVATION

Project No.: 084-20

Date Pictures Taken: August 24-September 2, 2020





Photo 1 (DAY 1): 8/24/20 Begin excavation of Blue Polygon (A); view to NW.



Photo 2 (DAY 1): 8/24/20 Begin excavation of Blue Polygon (A); view to W.



Photo 3 (DAY 1): 8/24/20 Trucks await loading of excavated soil; view to SE.



Photo 4 (DAY 1): 8/24/20 Excavating Blue Polygon (A); view to NW.



Photo 5 (DAY 1): 8/24/20 Excavating Blue Polygon (A), residential home (offsite) in background; view to SSE.



Photo 6 (DAY 1): 8/24/20 Excavating Blue Polygon (A) to 6ft; view to E, Spinnaker Coating in background.

Project name: SPINNAKER COATING PHASE B LSI SOIL EXCAVATION

Project No.: 084-20

Date Pictures Taken: August 24-September 2, 2020





Photo 7 (DAY 1): 8/24/20 Excavating Blue Polygon (A), approaching 6ft depth; north wall.



Photo 8 (DAY 1): 8/24/20 Excavating Blue Polygon (A), metal and glass debris at depth.



Photo 9 (DAY 1): 8/24/20 Begin excavation of Blue Polygon (B); moving eastward (to the left); view to S and East Water Street.



Photo 10 (DAY 1): 8/24/20 Excavating Blue Polygon (B), truck #10 soil load; view to WSW.



Photo 11 (DAY 1): 8/24/20 Loading truck #12 during excavation of Blue Polygon (B) to 6ft depth; view to ESE. Inset photo shows the western/adjacent Blue Polygon (A); view to NW.



Photo 12 (DAY 1): 8/24/20 Preparing to collect soil samples from Blue Polygons (A) and (B); soil sample containers, PID for soil volatiles screening, field map showing polygons and sample locations.